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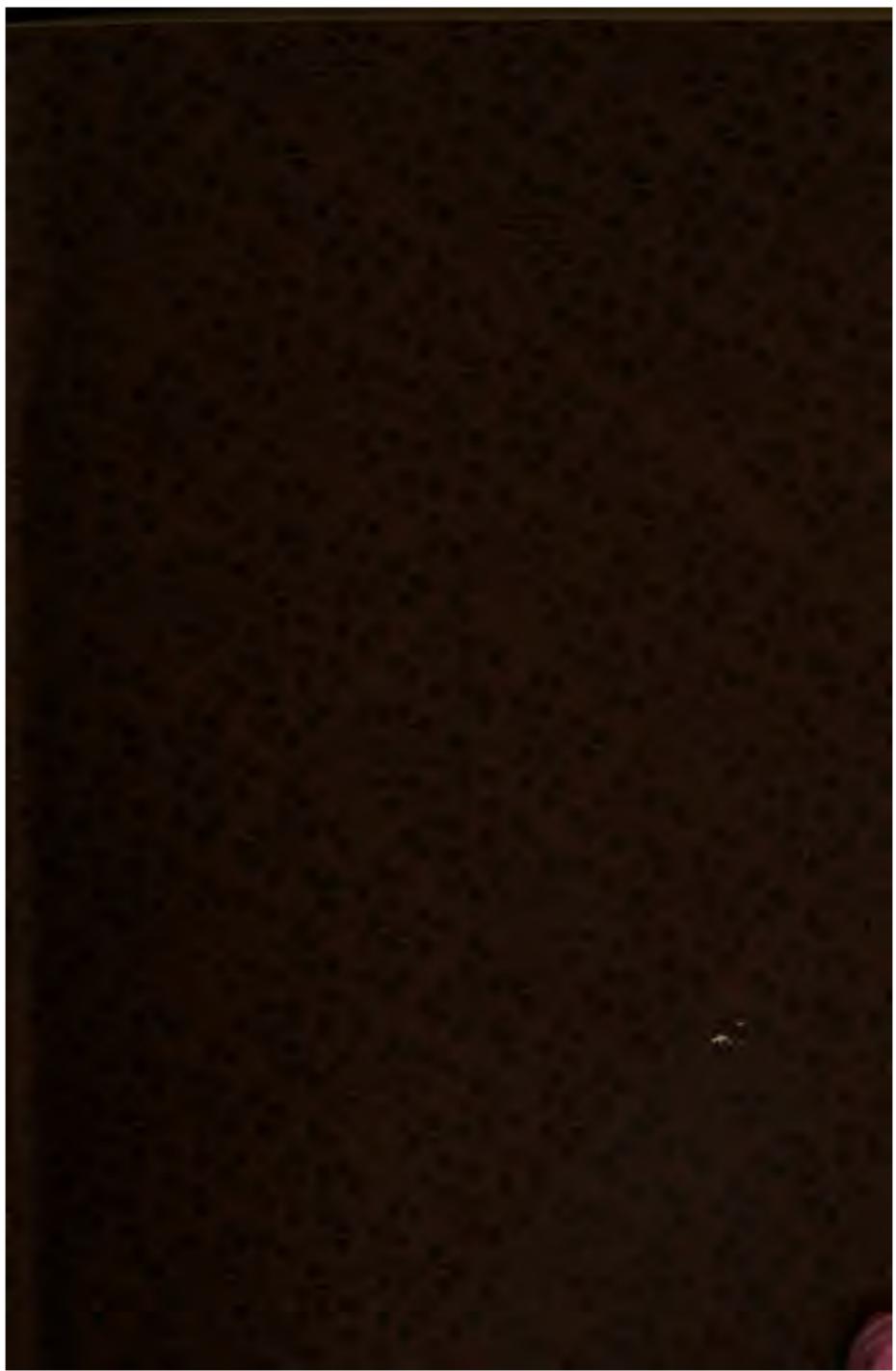
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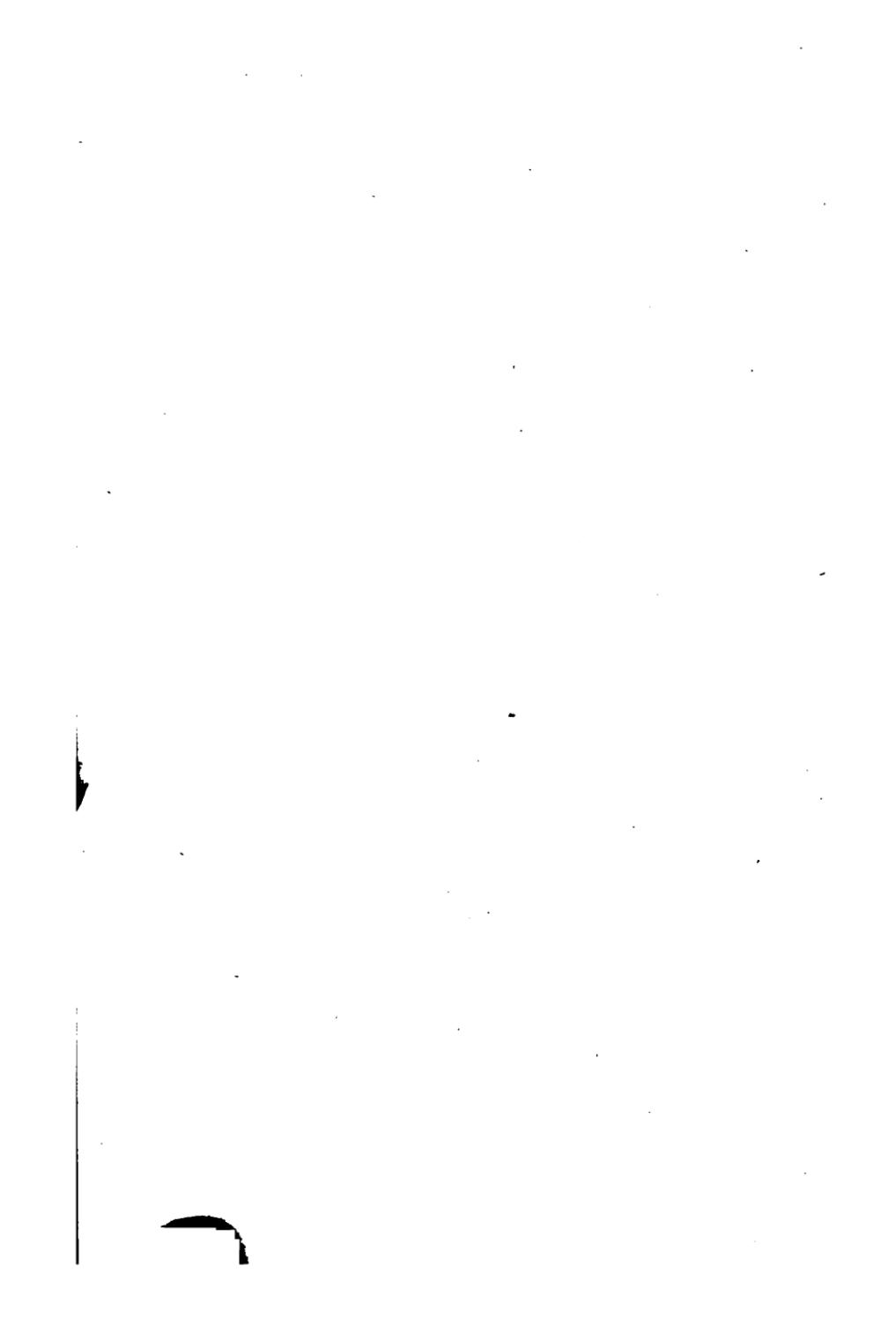
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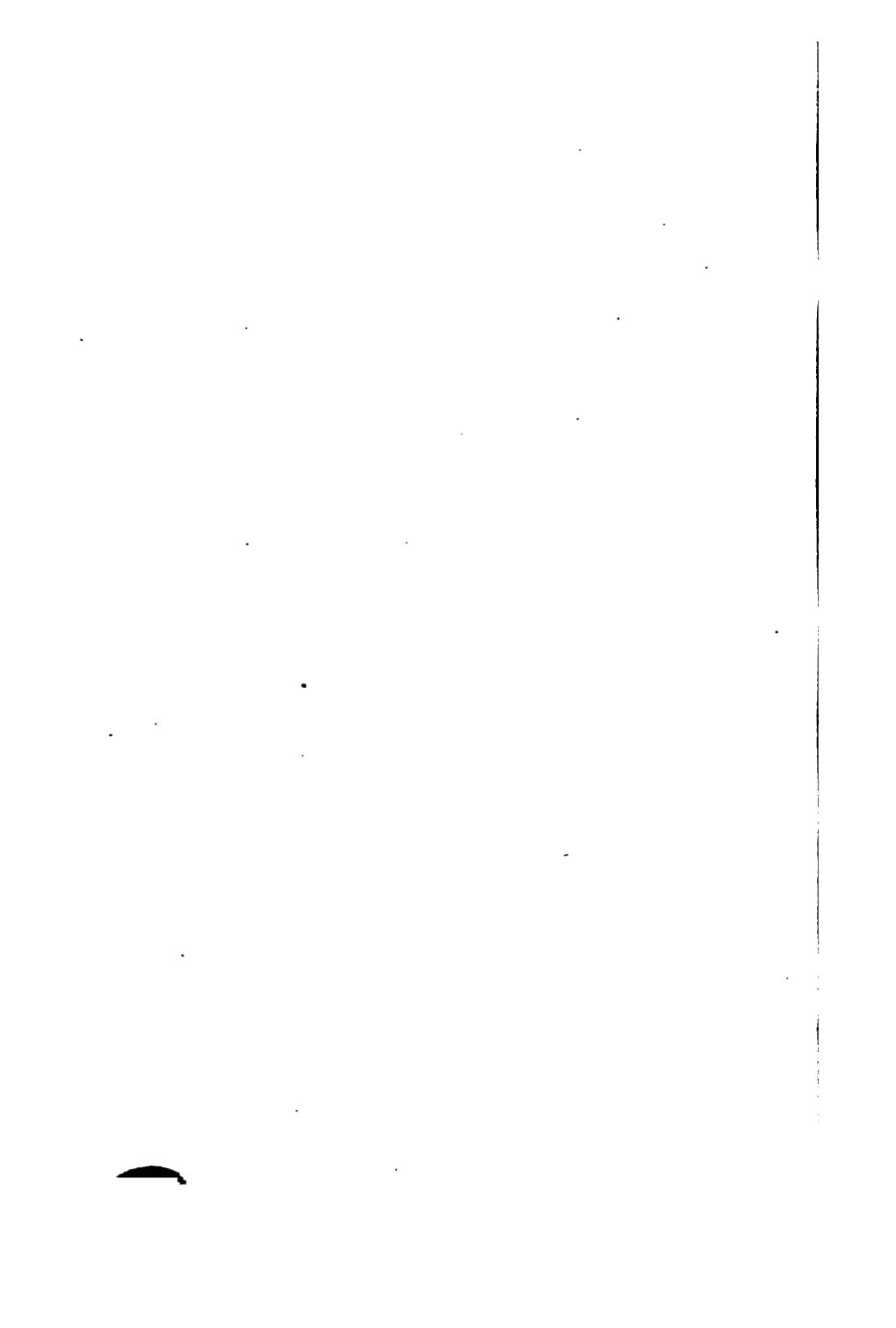


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SIXTIETH

ANNUAL MEETING

OF THE

2406

American Institute of Instruction

LECTURES, DISCUSSIONS, AND PROCEEDINGS

BETHLEHEM, N. H., JULY 8-11, 1889

Published by order of the Board of Directors

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AMERICAN INSTITUTE OF INSTRUCTION.

Sixtieth Annual Meeting,

JULY 8, 9 10, AND 11, 1889.

JOURNAL OF PROCEEDINGS.

FIRST DAY—MONDAY, JULY 8.

The sixtieth annual meeting of the American Institute of Instruction opened in the Casino at Bethlehem, N. H., Monday evening, July 8, 1889, George A. Littlefield, of Newport, R. I., presiding.

Hadley's Maplewood Orchestra played, while the audience was assembling, "Gen. Banks's March," by Rollinson.

President Littlefield called the meeting to order at 8 p. m.

After prayer by the Rev. W. P. Philbrook, of Bethlehem, N. H., the audience, assisted by the Temple Quartette of Boston, and accompanied on the piano by Prof. Hadley, of Somerville, Mass., sang "America."

Gen. Geo. T. Crust, of the Maplewood, then, on

behalf of the people and hostelries of Bethlehem, welcomed the Institute to the beautiful village.

Gen. Cruff said that he had the very agreeable duty of greeting the members of the American Institute of Instruction in the sixtieth year of the existence of that body, as they gathered for their annual convention. The people of Bethlehem knew the honorable character of the organization, and the noble and valuable service it had rendered for so many years in the great cause of education. The office of teacher is in its nature the highest office. The wisest and best men that have appeared upon earth have come as teachers. And these men and women, pursuing, in their chosen vocation, their quiet, conscientious, and patient work, ever hold the respect and homage of the good, the wise, and the great. He extended to them as an organization and to each one individually, on behalf of the town, a hearty welcome to Bethlehem and its homes. He bade them come up from the lower realms into the purer ether of this topmost town of New Hampshire, leaving behind them their cares and distractions of mind. He greeted them as they came up to the top of Jacob's Ladder ; to this Mount Zion "beautiful for vision ;" to this town "truly set upon a hill," the light of whose fame "cannot be hid." He would not expatiate upon the charming character of the attractions which the town holds out to the tourist, the lover of nature, the seeker for health ; upon the glories and grandeur of its views, meeting the eye on every side ; upon the loveliness of its sunset skies ; upon the exhilaration and healthful vigor which a stranger feels in the inhalation of every draught of its air. He would rather that they prolong their stay, that they might say, as did the Eastern queen of the glories of the ancient temple, "Behold, the half was not told me." He contrasted Bethlehem as it is now with what it was twenty-five years ago. The following just reference to Mr. Isaac S. Cruff will commend itself to the approbation of all who know Bethlehem : "Built upon the same hill to-day by the enterprise of some of the members of the same families, stimulated to life and action by the example of building in the princely outlay of money made by a Boston merchant, forever to be remembered as one of the town's greatest benefactors, Bethlehem has made a complete transformation of appearances, only two houses along the entire length of the main street bear-

ing the least resemblance to their appearance twenty-five years ago." The general referred to the meeting at the Casino in the following words: "I should perform but a part of my obligation on this occasion, did I fail to extend to you, on behalf of the owner, a Boston merchant, a welcome to this beautiful building. It is not designed for public use or for promiscuous public gatherings, but for the enjoyment of those, in social uses and recreation, who make their summer home on the Maplewood premises. With an appreciation of your purpose, and desirous of gratifying your officers, he hastened its completion and permitted its use, that you might thus find a hall large enough to make possible your coming to Bethlehem. The honor of dedicating this 'Casino' is given to you. You dedicate it, not as a lordly pleasure-house designed only for idle recreation, but as a place where wisdom is allowed to enter, and where may always be welcome that which may dignify and better humanity." In conclusion, he hoped that the cup of personal enjoyment might be filled to the fullest measure for the members; that the ambitions of officers and members might be realized in an outcome of great good to the cause of education; that each one might receive an inspiration and incitement to greater zeal and usefulness in his school work; that the cordial and hospitable treatment received here, as well as the features of the place, might prompt each one to come again; and that the best and happiest part of their visit to Bethlehem might be the pleasant and profitable memories to be carried away to sweeten and brighten their future lives.

Hon. David A. Goodell, governor of New Hampshire, welcomed the Institute to the Granite State thus:

The Institute represents the best foundations of society. The teacher's responsibility, since so much depends on his labor, is far beyond our present comprehension. As the daughter inherits the maternal instinct and imitates the mother's ways; as the son develops the paternal traits, and patterns after the father,—so the pupil will bear his teacher's lineaments, and in his future life correspond to his teacher's impress. Because, therefore, of the greatness of their vocation, he welcomed the teachers to this

grand old state. Here God had printed the stamp of greatness and permanency. Here He had hung out the sign of the Old Man of the Mountains as a pledge that here should abide health and strength.

Hon. James W. Patterson, Superintendent of Public Instruction for New Hampshire, extended a welcome in the name of the teachers and school officers of the state as follows :

As the official representative of the educational interests of the state, it becomes my pleasing duty to extend to you a cordial welcome to New Hampshire. Some ante-natal influences in our early history limited somewhat the physical dimensions of our state, but we hope to find room enough to furnish ample and satisfactory accommodations for the present meeting of this ancient and honorable association. We have found some relief for our restricted boundaries in the height of our mountains, and some compensation for our diminutive territory in the magnitude and multitude of our sons and daughters who have emigrated to other states.

But with a slight change in phraseology, I will say, in the language of one of the sons whom we reared, and educated, and loaned to a neighboring state, "I shall enter on no encomium upon New Hampshire. She needs none. Here she is: behold her, and judge for yourselves."

From the weariness, fret, and irritation of the school-room, we welcome you to the rest, freedom, and joy of our everlasting hills. On these high places we may worship the grandeur and beauty of nature without idolatry, and lift our thoughts from the deep ruts worn by the treadmill march of our ordinary life.

The mind of the professional teacher, moving for years along prescribed courses of study, for the most part limited and elementary in their range, is in constant danger of becoming cramped, narrow, mechanical, and unproductive in its activity. Rest and recreation are a necessity and a duty to the teacher. It is his way of escape from mental paralysis and spiritual death.

The conscientious teacher whose culture is liberal, hungers for larger and deeper questions, for problems that, though related

primarily to his work, reach forward to the broader life of society beyond the schools.

Wearied with the familiar drudgery of presenting, by improved methods it may be, but for the hundredth time, the elements of knowledge,—old facts and theories,—to successive classes of restless youths not yet awakened to intellectual activity, we pant for an escape into the realms of song and fiction; we would be refreshed with the fruitage of history and philosophy, or would let the tired faculties rest in some secluded lap of nature, and listlessly absorb its infinite charms and surpassing glories, till the mind so medicined recovers its wonted self-activity, its original vigor and spontaneity.

In seasons of recreation and rest, the teacher should loosen the bit upon his curbed imagination, that it may run free in the fields of beauty; that it may commune with the whispering stars, the many-voiced sea, and the solemn utterances of the unpeopled hills, and so assert its peerage among the intellectual powers. The judicious culture of this element of our nature is essential to the elasticity, freshness, and vigor of the mind, as a whole, the sole self-working agent in the mysterious problem of life.

We would not disparage the logical faculty. It is the regnant factor in the intellectual functions. Facts must be marshalled into their proper ranks by reason, or they become a cram of useless lumber in the memory. Learning without this is indiscriminate knowing, not education.

But even systematized knowledge is dead, if not vitalized by the imagination. We must be inspired by grand and glowing pictures, which fancy has drawn from the realms of literature, nature, and life, or the mind remains torpid, jejune, and nerveless, and we are never impelled into forceful and sustained activity. The soul of the successful teacher will be filled with forms of excellence and power, and will thrill with concepts of things true, beautiful, and grand.

Here, amid these countless wonders of creation, so calculated to awaken the dormant sensibilities, we have the best school, too, for the discipline of the mind to that power of quick, comprehensive, and accurate observation so essential to our profession, and especially for the best work in oral and object teaching.

The natural blindness of the mind to the works and marvels of nature and art and of passing events is a universal clog and dis-

honor to the race. The testimony of men, on the simplest subjects and under the solemnities of an oath, is generally in conflict because of our uneducated and slovenly habits of observation. It is this want of developed power to see things that baffles our best efforts in teaching, and throws doubt and uncertainty into all our acquisitions. To conquer this natural depravity of the mind, we must give to the faculty of observation long, laborious, and thoughtful care, as Gladstone has done till he drinks knowledge through every sense.

But the weariness and failure of our vocation come largely from the false and vicious ways in which we conduct it. Libraries have been written on the philosophy of education, but these volumes reach comparatively few of those engaged in the work. Educational journals are carrying light downward through the ranks, and normal and training schools are raising up exemplars of the better way; but thousands of our profession are still sacrificing health, and all the Christian graces, in the vain and impossible effort to educate the mind through the memory, which, like an over-burdened stomach, rejects the surfeit with infinite disgust. This stuffing process is suicidal to the agent, and cruelty to the wronged and rebellious subjects. But to educate the mind, as God does the heart, by breathing into it your own spirit "to will and to do," and then watching and directing its unfolding, as it rises into strength and dexterity, is the joyous and healthful mission of the divinely appointed teacher.

The schools of our fathers were very defective in their processes; but as their curriculums were limited, they gave time, when judiciously conducted, for the intellectual powers to grow by legitimate activity. We have made essential improvements in the theory of education and in methods of instruction, but the extent of our courses of study, and our haste of acquisition, subject us to a liability from which the old schools were measurably free. They often managed, with all their faults, to secure discipline of faculty, personality of character and moral stamina, if not broad scholarship. Education, rightly apprehended, is not growth by an endless accretion of facts, but growth by subjective development, by the digestion, assimilation, and appropriation of truth. It is the edifying of character into a strong, pure, and noble manhood and womanhood. Accumulations of knowledge, for the most part, come later, by the unconscious schooling of life, for which our pupilage is the preparation.

The mills, in which some of our modern teachers grind, may grind exceeding small, but they grind too fast to be the mills of God. Such schools fit students for a rehearsal, not for a test of powers. When we attempt to hasten the processes of nature, we are apt to get a hot-bed growth. Chase, Choate, and Webster are types of the men our New Hampshire college gave to the country half a century since. Where have we any better results to-day?

At teachers' institutes and other local educational gatherings, there is a propriety in confining the exercises mainly to methods and the practical every-day work of the school-room, but in the annual gatherings of the larger and older associations of our profession it seems eminently fitting that we should discuss the broader questions that relate to the educational policy of the republic; to the place and character of our work in a free government, and to its influence upon the liberties, the social conditions, and religious obligations of society. Who, if not we, have a right to speak, and to speak plainly and explicitly, on the relations of public education to everything honest and of good report in this country? Who, if not we, are called upon to warn the nation of the decay of political rights in the increase of public illiteracy, and of the peril to freedom from the usurpations of a shameless plutocracy? Who, if not we, are obligated to defeat the treacherous efforts now made to break up the foundations on which the fathers built a free church and a free state?

For a full and fearless recital of the history and the principles upon which our American system of public education is based, I welcome you gladly to our little commonwealth. We do not boast of an extended acreage, a fertile soil, or a genial clime, but by the compensating favor of Providence the state has been productive of teachers whose influence has been a benediction in every latitude and from sea to sea; of soldiers whose blood, in ten wars, has moistened the soil of every state but their own; and of statesmen whose genius has breathed the spirit of nationality into the organic law of the republic, and built new empires of freedom on the public domain. Here and among such a people there is no place for angry fanaticism or professional dogmatism, but we call for a calm and rational sifting of the charge that our public schools are nurseries of infidelity and crime, and "likely to destroy all that is good in American Christianity."

It is the duty of scholars, in their associated organizations, sternly to rebuke this revival of dark-age heresies. They who would crush the schools, or transform them into an organ of sectarianism, are foes to social progress and personal liberty, for they would make it impossible for the people to come into the full possession and enjoyment of that great inheritance which we designate the civilization of the age, and would hold the masses in social and spiritual vassalage to the intellectual and official masters of the world.

We may allow, for the sake of argument, that the first-fruit of popular enlightenment will be rebellion against canonized authorities; but even doubt and agnosticism, bad as they are, have as much spiritual value as the credulity of universal ignorance.

In the papers and searching debates of our annual gatherings, upon different phases of the great cause in which we are all engaged, the accidental and fanciful will fall before what is sound and essential; eccentricities and exaggerations, false theories and unsuccessful experiments, will be eliminated, and the educational work of our day be reduced to an intelligible working system. The growth and future history of American education will be traced along the line of our published proceedings.

But another, and perhaps the highest, function of the institute is to kindle and concentrate national sentiment upon the transcendent importance of the interests at stake in the public schools.

Let us have a solemn affirmation, by public utterance, from the teachers of the youth of the nation, that an ignorant ballot is a menace to freedom; that the skill and perfection of mechanical labor, the genius of invention and discovery, the deftness and beauty of artistic industries, the lucrativeness of trade by sea and land, the extent and variety of the products of agriculture and manufactures; that popular enterprise and national character,—all have their springs in the schools of the republic. Let it be iterated and reiterated, that social advancement, political equality, and domestic happiness would all die in the styes of barbarism but for the intellectual and moral schooling of the people.

Let the evident truth that the right of self-government is born of intelligence and must perish with the loss of power to administer it, that it is but a step from plutocracy to anarchy and from anarchy to despotism, be pressed home upon the people with startling emphasis, that the public may be revived to a generous

and enthusiastic support of the schools of learning of every degree and in the religious spirit in which they were planted by the fathers.

To such exalted and imperative work we welcome the association, not less than to the feasts of reason and to the nectar of the hills.

In the annals of voluntary association for beneficent exertion there has been no combination more patriotic and unselfish in its intent; none has exhibited more vital force, or a grander secular wisdom, than our own.

With patriarchal longevity in its nature, it is yet youthful at sixty. As Milton said of Eve, she is "fairest of her daughters since born." And how splendid is its record! In its published annals may be found substantially whatever of wisdom, inspiration, or beauty the brightest, profoundest, and most learned have given to the cause of education for the last half century. Its influence has drawn the whole body of teachers into affiliation, and its power has been felt in every state of the Union.

With advancing years, it becomes more and more the duty of teachers to maintain the organic life and fraternal greetings of this venerable institution, linked as its record is with the memories of many of the purest and noblest of the country's benefactors and with the most enduring and illustrious achievements of two generations. Let us work together to perpetuate the life and the strength, the influence and the fame, of this mother of educational associations.

Mr. George A. Littlefield, president of the Institute, responded to these several addresses of welcome, in words felicitously conveying the sentiment of the Institute.

After his address, President Littlefield called upon the Temple Quartette of Boston, who sang Mendelssohn's aria "Lift Thine Eyes;" and, in answer to a hearty encore, Otto's "The Sparrow's Twitter."

Mr. Leland T. Powers, of Boston, read very expressively Mrs. H. B. Stowe's "The Minister's Housekeeper."

Prof. E. B. Andrews of Cornell, and president-elect of Brown University, delivered a lecture on "THE INDISPENSABLENESS OF HISTORICAL STUDIES FOR TEACHERS."

Mr. W. J. Corthell, of Gorham, Maine, followed in further discussion of this topic.

Mr. Powers read a selection from Mark Twain's "Roughing It," entitled "The Miner's Story."

The Temple Quartette then charmingly rendered Bishop's "Sleep, Gentle Lady."

The Institute thereupon adjourned.

As the audience dispersed, Prof. Hadley's orchestra played in admirable style Rollinson's "Chink of Gold Galop."

SECOND DAY—TUESDAY, JULY 9.

MORNING SESSION.

The Institute resumed its session in Crust's hall at the village.

Before the call to order, Prof. Hadley's Maplewood Orchestra played Tracy's "Esperanza March," and Keler Bela's "Overture Comique."

The president rapped to order at 9:30 a. m.

Devotional exercises were conducted by Rev. Forrest F. Emerson, of Newport, R. I., in the reading of Scripture and in prayer, and the audience, led by Prof. Hadley and assisted by the Temple Quartette, joined in singing "Boylston" and the "Italian Hymn."

The president appointed the following committees:

COMMITTEE ON NOMINATIONS.

James F. Blackinton.
W. J. Corthell.
S. W. Landon.
Thos. B. Stockwell.
Lemuel S. Hastings.
J. D. Bartley.

COMMITTEE ON RESOLUTIONS.

William T. Peck.
Henry C. Hardon.
Charles H. Morss.
B. G. Northrop.
Jere M. Hill.

Dr. William T. Harris, of Concord, Mass., delivered an address on "THE STUDY OF NATURAL SCIENCE; ITS USES AND DANGERS."

Dr. A. P. Stone, of Springfield, Mass., Mr. Lemuel S. Hastings of the Claremont, N. H., High School, and Dr. Larkin Dunton of the Boston Normal School, participated in the discussion which followed.

The president gave notice of ample room at the Maplewood, of special rates to members at hotels in neighboring places, and of reduced rates in carriage hire. Other notices of incidental matters were given.

The secretary read certain notices, among which was an offer from President George T. Angell of the American Humane Education Society, etc., to give a prize of one hundred dollars for the best essay, of not over twenty-four hundred words, on "The Effect of Humane Education on School Discipline and the Prevention of Crime,"—the essays to be presented as early as January 1, 1890.

Intermission.

After the intermission, the Temple Quartette sang Krug's "Drum March," and for an encore, Kreutzer's "Three Huntsmen."

Prof. John F. Woodhull of the New York College for the Training of Teachers read an address, which he illustrated by easy and striking experiments, on the subject of "NATURAL SCIENCE FOR THE COMMON SCHOOLS BY EXPERIMENTAL METHODS."

The discussion was to be opened by Prof. William North Rice of Wesleyan University; but President Littlefield received a telegram, which he read, stating that the professor could not be present; and, after giving out some other notices, he called upon Mr. Charles W. Parmenter of the Cambridge Latin School, who spoke in Prof. Rice's stead. Mr. Parmenter was followed by Mr. Arthur L. Goodrich of the Salem High School, by Professor Woodhull in reply, and by Mr. George A. Walton, of West Newton, Mass.

The Institute was then adjourned.

SECOND DAY—EVENING SESSION.

The evening session at the Casino was preceded by a concert by Prof. Hadley's Maplewood Orchestra:

Casino March.....	H. K. Hadley.
Overture, Belle of the Night.....	Herman.
La Manola March.....	Waldteufel.
Heart's Delight Gavotte.....	A. E. Warren.

At 7:30, President Littlefield called the assembly to order, and at his request Mr. Howard played a voluntary on the organ.

The Temple Quartette, of Boston, rendered Buck's "Hark, the Trumpet," and, in response to an encore, Hatton's "The Long Years Have Passed Away."

Mr. Leland T. Powers, of Boston, presented a scene from "David Copperfield," and for an encore, read in dumb show a "Letter from Home."

President Littlefield stated that, in consequence of the enforced absence of President S. C. Bartlett of Dartmouth college, announced to read a paper on "Reading," he would invite State Superintendent Patterson to address the Institute.

State Superintendent J. W. Patterson, of New Hampshire, addressed the Institute on "A RUN THROUGH ENGLAND AND SCOTLAND."

The subject of "Reading" was then taken up, according to the programme, and was discussed by Principal William H. Lambert of the B. M. C. Durfee High School, Fall River, and Supervisor Robert C. Metcalf, of Boston.

The Temple Quartette, of Boston, sang Caldicott's "Little Jack Horner," and, on recall, J. C. Warren's "Annie Laurie."

Mr. Leland T. Powers, of Boston, recited a second scene from "David Copperfield."

Adjournment.

Prof. Hadley's Maplewood Orchestra played, as the audience dispersed,

Galop, *Avec Plaisir*.....H. K. Hadley.

At Gen. Crust's invitation, the Institute enjoyed an informal reception at the Maplewood, where further selections by the Temple Quartette and recitations by

Mr. Powers were given, and a social reunion was held.

THIRD DAY—WEDNESDAY, JULY 10.

MORNING SESSION.

Before the session of the Institute was resumed in Cruft's hall, Prof. Hadley's Maplewood Orchestra played,

Czibulka's "Fra Bombarda March."

Eilenberg's "Mill and Forest."

Rollinson's "Always on Time."

At 9:30, President Littlefield rapped to order.

Devotional exercises were conducted by Rev. Charles Harbutt, of Bridgton, Maine, who read scripture and offered prayer.

Prof. Hadley conducting, the Temple Quartette, of Boston, and the audience led by that Quartette, sang alternately three verses of "Nearer, My God, to Thee;" also, two verses of "Old Hundred" were sung by all.

Mr. Henry C. Hardon, Master of the Shurtleff School, Boston, read an address on "THE SCHOOL AS IT IS, AND THE NECESSITY FOR MANUAL AND INDUSTRIAL TRAINING."

In the absence of Superintendents Seaver, of Boston, and Robinson, of Franklin Falls, who were to address the Institute, the president invited the following three speakers to discuss the subject:

Supt. James MacAlister, Philadelphia.

Prin. James B. Taylor, Berkeley School, Boston.

Pres. George F. Magoun, of Iowa.

After a brief recess, the president remarked upon some variations in the programme.

Secretary Huling then was called upon, in the absence of the author, to read an abstract of Gen. Thomas J. Morgan's paper on the "EDUCATION OF THE MASSES."

The discussion of this topic was opened by Mr. Frank A. Hill of the Cambridge High School, and continued by Mr. George T. Fletcher, Agent of the Massachusetts Board of Education, and Hon. Joseph D. Taylor, M. C., of Ohio.

A general discussion of this theme was suggested, but, on motion of Dr. Larkin Dunton, it was omitted.

Intermission.

Prof. Albion W. Small of Colby University, Maine, addressed the Institute on "THE DYNAMICS OF SOCIAL PROGRESS."

The discussion of this subject was maintained by Supt. J. G. Edgerly, of Fitchburg, Mass., and Hon. B. G. Northrop, of Clinton, Conn.

President Littlefield gave some notices of incidental matters.

Adjournment.

THIRD DAY—EVENING SESSION.

Preceding the evening session at the Casino, Prof. Hadley's Maplewood Orchestra gave a concert:

Nahant March.....	W. H. Thomas.
Ocean Pearls Overture.....	Herman.
Tête à Tête Waltzes.....	H. K. Hadley.

President Littlefield called the Institute to order.

The Temple Quartette, of Boston, sang Schmölze's "Hurrah for the Fields" and "At Early Morning."

Supt. James MacAlister, of Philadelphia, addressed the Institute on "THE ADJUSTMENT OF SOME RECENT TENDENCIES IN ELEMENTARY EDUCATION."

The subject was discussed by Rev. A. E. Winship, editor of the *New England Journal of Education*, Dr. Alexander Anderson, president of Prince of Wales College, Prince Edward Island, and Mr. John Kneeland, supervisor of public schools, Boston. Superintendent MacAlister briefly closed the debate.

The Temple Quartette, of Boston, sang the "Carnival of Venice" and "Peter Piper."

Prof. J. W. Churchill, of Andover, Mass., read "Nicholas Nickleby at Squeers' School," from Dickens, and, in response to an encore, "The Two Runaways," by H. S. Edwards.

The Temple Quartette, of Boston, sang Dudley Buck's "John Anderson."

Adjournment.

As the audience withdrew, Prof. Hadley's Maplewood Orchestra played Zimmermann's "Hunting Pleasure March."

FOURTH DAY—THURSDAY, JULY 11.

MORNING SESSION.

Before the session at Crust's hall, Prof. Hadley's Maplewood Orchestra played the following numbers:

Rollinson's "Concentration March."

Czibulka's "Sans Souci" Gavotte.

Rollinson's "Entre Nous" Galop.

President Littlefield called the assembly to order.

Rev. C. J. Chase, of Bethlehem, N. H., read the scriptures and offered prayer.

The Temple Quartette, of Boston, chanted after prayer, "Remember now Thy Creator," and led the audience in singing "America" and "Auld Lang Syne."

Principal A. H. Campbell of the State Normal School at Johnson, Vt., read an address on "THE PLACE OF THE NORMAL SCHOOL."

The discussion was opened by Dr. D. B. Hagar, principal of the State Normal School at Salem, Mass., and was continued by Superintendent G. C. Fisher, of Weymouth, Mass.

President Littlefield then called for volunteers, especially from among the ladies.

The subject was further discussed by Principal A. L. Goodrich of the Salem High School, Mrs. Mary Davis Moore, of Oswego, N. Y., Superintendent J. G. Edgerly, of Fitchburg, Mass., Hon. B. G. Northrop, of Clinton, Conn., and Miss Grace J. Haynes of the Gorham, Me., Normal School.

Intermission.

Miss Mary Bugbee of the White Mountain Summer School, recited Will Carlton's "Death Bridge of the Tay."

Hon. Thomas B. Stockwell, State Commissioner of Education, Rhode Island, delivered an address on "THE POLITICAL FUNCTION OF THE PUBLIC SCHOOL."

Superintendent W. E. Hatch, of New Bedford, Mass., introduced the discussion of the theme. He

was followed by State Superintendent Patterson, of New Hampshire.

Mr. William T. Peck, principal of the Providence High School, then, as chairman of the Committee on Resolutions, reported the following sentiments :

Resolved, That instruction in Natural Science by the experimental method should be given in schools of all grades; that in primary and grammar grades it should take the form of observation lessons, calculated to develop the spirit of investigation, so that by the time the pupil reaches the high school he will be prepared to begin more systematic study; that in the high school it should undertake to give a thorough training in scientific methods of studying nature, rather than a comprehensive knowledge of the whole realm of Natural Science.

Resolved, That the time has now come for such a reorganization of our courses of instruction, both elementary and secondary, as shall make provision for a system of manual training in its most comprehensive sense; that shall render the education given in the schools broader and more complete, while bringing them into closer sympathy with the spirit and tendency of our civilization.

Resolved, That we extend our most hearty thanks to Gen. Geo. T. Cruft, by whose careful planning, intense enthusiasm, and persistent labor the privileges that we enjoy at this meeting have been chiefly secured; to the Hon. Isaac S. Cruft, for the use of the Casino, and for other courtesies; to the proprietors of the hotels and boarding-houses and to the citizens of Bethlehem, for a cordial welcome and generous treatment; to the various railroad corporations, for reduced rates of travel; to the distinguished public men, lecturers, readers, singers, musicians,—to all who, by pen, tongue, or hand, have served the Institute; to the officers, for the painstaking discharge of their respective duties, and especially to the president, George A. Littlefield, to whose indefatigable zeal and remarkable executive ability is largely due the success of the Sixtieth Annual Meeting of the American Institute of Instruction.

Hon. G. A. Walton, of Massachusetts, objected to the phraseology of the first resolution. He considered

“science in all grades” a misrepresentation of the facts and of the true theory ; and he moved to amend by substituting at the point designated the phrase “elementary and scientific instruction in the various departments of nature.”

Mr. E. Norris Sullivan, editor of *The Popular Educator*, seconded the motion.

Dr. A. P. Stone, of Springfield, Mass., opposed the amendment, on the ground that there was not sufficient time to debate the proposition.

The motion to amend was put, and defeated.

Dr. A. P. Stone then moved the adoption of the resolutions as a whole, and the motion prevailed.

Mr. James F. Blackinton, of East Boston, Mass., chairman of the Committee on Nominations, reported the following list of officers for the ensuing year. He remarked that the first five officers were renominated ; but some necessary changes in the rest of the list had been made.

Hon. Thomas B. Stockwell, of Rhode Island, was called to preside during the discussion of this list.

Various substitutions and verbal changes were made ; and the secretary was instructed to make any obviously necessary clerical alterations.

On motion of Dr. A. P. Stone, it was voted that the chairman of the Committee on Nominations cast the ballot for officers as the ballot of the Institute.

Mr. J. F. Blackinton complied with instructions, and the officers named were declared elected officers of the Institute for the ensuing year.

Secretary Ray Greene Huling stated that, in consequence of the changed plan of membership, it had recently happened that former members who had not

been elected to the new membership, had nevertheless been elected to office under the new regime. He therefore moved that, in the present instance, nominees not members of the Institute be, by election to office, constituted members of the Institute.

The motion was carried.

THE OFFICERS ELECTED FOR 1889-'90.

President—George A. Littlefield, Newport, R. I.

Secretary—Ray Greene Huling, New Bedford, Mass.

Assistant Secretary—Augustus D. Small, Boston, Mass.

Treasurer—James W. Webster, Malden, Mass.

Assistant Treasurer—Henry Whittemore, Waltham, Mass.

Vice-Presidents—MAINE.

W. J. Corthell, Gorham.	O. W. Lord, Portland.
A. M. Edwards, Lewiston.	G. C. Purrington, Farmington.
G. B. Files, Augusta.	A. F. Richardson, Castine.
R. E. Gould, Biddeford.	E. P. Sampson, Saco.
James H. Hanson, Waterville.	N. A. Sargent, Hebron.
Jeremiah M. Hill, Bangor.	Albion W. Small, Waterville.
Mary E. Hughes, Castine.	C. A. Wardwell, Bath.
L. G. Jordan, Lewiston.	

NEW HAMPSHIRE.

William E. Buck, Manchester.	Charles H. Morss, Portsmouth.
C. H. Clark, Kingston.	John Pickard, "
Channing Folsom, Dover.	Charles C. Rounds, Plymouth.
Amos Hadley, Concord.	L. J. Rundlett, Concord.
L. S. Hastings, Claremont.	O. S. Williams, Nashua.
John K. Lord, Hanover,	J. H. Willoughby, "
D. G. Miller, Meriden.	

VERMONT.

M. H. Buckham, Burlington.	A. L. Hardy, St. Johnsbury.
A. H. Campbell, Johnson.	S. W. Landon, Burlington.
Edward Conant, Randolph.	Edwin F. Palmer, Waterbury.
Joseph A. DeBoer, Montpelier.	

MASSACHUSETTS.

George I. Aldrich, Quincy.	William E. Hatch, New Bedford.
Sarah J. Baker, Boston.	Eli A. Hubbard, Hatfield.
Thomas M. Balliet, Springfield.	Ellen Hyde, Framingham.
Thomas H. Barnes, Boston.	Daniel W. Jones, Boston.
Thomas W. Bicknell, "	Charles F. King, "
James F. Blackinton, "	John Kneeland, "
Albert G. Boyden, Bridgewater.	George H. Martin, Lynn.
William F. Bradbury, Cambridge.	Samuel W. Mason, Chelsea.
O. B. Bruce, Lynn.	A. D. Mayo, Boston.
I. N. Carleton, Bradford.	R. C. Metcalf, "
W. A. Clark, Jr., Lynn.	John O. Norris, Melrose.
O. W. Cook, Swampscott.	Hiram Orcutt, Boston.
Justus Dartt, Whately.	James A. Page, "
E. H. Davis, Chelsea.	Charles W. Parmenter, Cambridge.
John W. Dickinson, Newton.	Alvin F. Pease, Northampton.
Larkin Dunton, Boston.	John T. Prince, Waltham.
W. E. Eaton, Reading.	W. A. Robinson, Boston.
A. W. Edson, Worcester.	Charles P. Rugg, New Bedford.
Thomas Emerson, Newton.	Edwin P. Seaver, Newton.
George T. Fletcher, Northampton.	William E. Sheldon, "
Homer T. Fuller, Worcester.	E. P. Sherburne, Brookline.
Arthur L. Goodrich, Salem.	Elbridge Smith, Boston.
E. J. Goodwin, Newton.	G. A. Southworth, Somerville.
J. C. Greenough, Westfield.	Admiral P. Stone, Springfield.
Daniel B. Hagar, Salem.	E. Norris Sullivan, Boston.
Henry C. Hardon, Newton.	John Tetlow, "
William T. Harris, Concord.	W. W. Waterman, Clinton.

RHODE ISLAND.

W. N. Ackley, Warren.	Joseph E. Mowry, Providence.
E. B. Andrews, Providence.	J. M. Nye, Phenix.
George E. Church, "	William T. Peck, Providence.
Sarah E. Doyle, Providence.	Levi W. Russell, "
Albert Harkness, "	John P. Sanborn, Newport.
E. H. Howard, "	James M. Sawin, Providence.
D. W. Hoyt, "	Thomas B. Stockwell, "
Daniel Leach, "	Horace S. Tarbell, "
L. H. Meader, "	W. E. Wilson, "

CONNECTICUT.

C. L. Ames, Plantsville.	Ella A. Fanning, Norwich.
Henry Barnard, Hartford.	J. A. Graves, Hartford.
F. F. Barrows, "	H. M. Harrington, Bridgeport.
J. D. Bartley, Bridgeport.	C. D. Hine, Hartford.
N. L. Bishop, Norwich.	Dwight Holbrook, Clinton.
D. N. Camp, New Britain.	Charles Northend, New Britain.
L. L. Camp, New Haven.	B. G. Northrop, Clinton.
C. F. D. Carroll, "	Henry D. Simmons, Bridgeport.
S. T. Dutton, "	W. I. Twitchell, Hartford.

ELSEWHERE.

George J. Cummings, Washington, D. C.	Thomas J. Morgan, Washington, D. C.
John Eaton, Marietta, O.	George Crosby Smith, Carmel,
W. S. Montgomery, Washington, D. C.	W. S. Montgomery, Washington, N. Y.

H. P. Warren, Albany, N. Y.

Counsellors.

James S. Barrell, Cambridge, Mass.
Francis Cogswell, Cambridge, Mass.
M. Grant Daniell, Boston, Mass.
Joseph G. Edgerly, Fitchburg, Mass.
J. Milton Hall, Providence, R. I.
Frank A. Hill, Cambridge, Mass.
William H. Lambert, Fall River, Mass.
A. J. Manchester, Providence, R. I.
Albert P. Marble, Worcester, Mass.
William A. Mowry, Boston, Mass.
James W. Patterson, Hanover, N. H.
E. R. Ruggles, Hanover, N. H.
Homer B. Sprague, Grand Forks, North Dakota.
Benjamin F. Tweed, Cambridge, Mass.
George A. Walton, Newton, Mass.
A. E. Winship, Somerville, Mass.

Mr. James S. Barrell, of Cambridge, Mass., chairman of the Committee on Necrology, introduced the subject with a few general remarks. Last year, he

said, Superintendent Thomas Tash, of Portland, Maine, presented the report on Necrology, in the absence of Dr. Merrick Lyon, who would have presented it, but who was even then lying upon his death-bed. And now Supt. Tash is also deceased. Mr. Barrell stated that the same plan would be pursued as last year, and called for brief eulogies from the speakers following :

Prof. Albert Harkness, on Dr. Merrick Lyon.
Dr. Larkin Dunton, on Mr. C. Goodwin Clark.
Prin. W. J. Corthell, on Supt. Thomas Tash.
Mr. Geo. T. Fletcher, on Prin. R. H. Woodbury.
Dr. D. B. Hagar, on Hon. E. C. Carrigan.
Mr. G. A. Walton, on Prin. J. G. Scott.

Prof. Albert Harkness, of Brown University, R. I., spoke as follows, to the memory of Dr. Merrick Lyon, of Providence, R. I., an ex-president of the Institute :

I do not rise at this late hour to make any extended remarks, but I cannot decline your kind invitation to say a few words in regard to our lamented associate and friend, Dr. Lyon. We have met here this morning as a band of educators, to consider the interests of our chosen profession, and we now pause for a few minutes in our accustomed work to pay a tribute of respect, of affection, and of love to the memory of one whose presence and words have, for many years, contributed so largely to the interest and success of our meetings.

To those of us who have known this Institute the longest, these annual meetings awaken mingled emotions. We contemplate with satisfaction the steady progress of our work. With glad hearts we greet our old friends, but we sadly miss from their places many whom in other days we learned to honor and to love. Year by year the sad duty of recording our losses, as we count up the names of the good and faithful men and women who have fallen from our ranks, claims a special place in our programme.

In the death of Dr. Merrick Lyon this Institute has lost one of its best and truest friends and one of its wisest counsellors. He had a high appreciation of the importance and dignity of the mission of this Institute. A generation ago he saw, with the clearness of prophetic vision, the vast possibilities for good opening before it. He accordingly identified himself with the enterprise with all the zeal and enthusiasm characteristic of his nature. He gave it his best thought and his most earnest endeavors. By word and example he sought to extend and deepen the interest in this great educational work.

Dr. Lyon filled with distinction every position of honor and trust in our gift. Some of you remember him as one of the rank and file of our company, and you remember that he was always in his place—always ready for duty. You remember with what loyal devotion he responded to your call, as you selected him for office, as you raised him from one position of trust to another, until with acclamation you placed him in the presidential chair. You remember, too, with what care all the arrangements were made for the meetings over which he presided, and with what complete success his efforts were crowned.

This Institute has long owed a debt of gratitude to Dr. Lyon which it has always been proud to acknowledge. It will cherish his memory as long as the good work with which his name is identified shall be remembered and appreciated.

In some respects the educational career of Dr. Lyon has been exceptional. Most of us have been called to labor in special lines, some in one department, some in another, some in school, and some in college, but we all recognize the important fact that our work is one. We are all laboring in different parts of one great field,—but Dr. Lyon, in the discharge of his varied duties as a teacher, as a member of school boards, and as a fellow of the University, was brought into close connections with our whole educational work. Not only did his broad sympathies take in every part of the great enterprise, but he actually labored in every part, and to-day the university cordially joins the school in doing honor to his name. In the academic halls of Brown his memory will be gratefully cherished as long as the college stands.

Dr. Larkin Dunton of the Boston Normal School, said of Mr. C. Goodwin Clark, of Boston,—

He was my most intimate and most beloved friend. He was a scholar, and was so thorough in his study as to win an honorary degree from Dartmouth college. He was a wise counsellor, and a consistent manager in his school. He was beloved by all who knew him. For a quarter of a century he has been an educational force in New England. He was honest and fearless in the support of that which he believed to be right. This trait, combined with his large warm-heartedness, explains his wide influence and the fervent love and abiding honor in which his name is held.

Principal W. J. Corthell of the Gorham, Maine, Normal School, in memory of Supt. Thomas Tash, of Portland, Maine, spoke as follows :

Mr. Thomas Tash, a member of the board of directors of the American Institute, and one of the most eminent, probably, of those outside of his own state, the most eminent educator of Maine, died suddenly at his home in Portland, Me., in May last. At noon he took his seat at his table, with his family, apparently in perfect health: before the next noon he had passed into another mansion in his Father's house.

Mr. Tash was a native of New Hampshire, a graduate of Bowdoin college, Me., and at his death some seventy-three years of age.

After graduation he taught high schools in various places in Maine and New Hampshire till called to take charge of the high school in Lewiston, Maine, at the time of the organization of the schools of that city on a new, liberal, and progressive plan. In that work he was eminently successful. Called from that position to the place of superintendent of the schools of the same city, the first instance of the establishment of a special superintendent of schools in any town or city of the state, he did much to commend the office to other towns and cities which were seeking to make their schools better. After some years of successful service in that position, he was called to Portland, Me., as city superintendent. Here, by a wise conservatism united to a progressive liberalism, by judicial fairness, by strong common-sense, by his quick and earnest sympathy with teachers and pupils, by his uniform courtesy, by wise forecast, he was the most

influential factor in placing the schools of Portland ahead of any others in New England.

He has fallen with his armor on, in the heat of the battle. We, his fellows in his chosen service, with sadness at our loss, with deep sympathy for the loved ones he left behind, yet with full faith in his own triumph, say, Noble comrade, hail and farewell!

Mr. George T. Fletcher, Agent of the Massachusetts Board of Education, offered a tribute to the memory of his successor, Principal R. H. Woodbury, of the Castine, Maine, Normal School. He said,—

Rolliston H. Woodbury was born in Sweden, Me., Dec. 17, 1840. His early education was obtained in the schools of his native town and at home. In 1860 he entered Bowdoin college, but at the opening of the war he enlisted in the army and continued in the service of his country until the close of the Rebellion.

Returning to Maine, he entered the Farmington Normal School, and after graduation became assistant teacher in that institution. His work, as teacher, was characterized by faithfulness and earnestness.

To a remarkable degree he won the regard and affection of his pupils, and the respect of his fellow-teachers and citizens. In July, 1879, he was elected principal of the State Normal School at Castine, Me., which position he held at the time of his death on November 1, 1888.

Not of strong constitution, the hardships of the war permanently impaired Mr. Woodbury's health, but his natural ability, training, and conscientious devotion to duty enabled him to render valuable service to the cause of education in Maine during his ten years' principalship of the normal school. The thoroughness of his work and the strength of his Christian character made an abiding impression upon his pupils. Mr. Woodbury, by influence, voice, and pen, was an active supporter of the cause of education in his native state. His kind and helpful words and genial manner will be long remembered by those with whom he was associated.

Dr. D. B. Hagar of the Salem Normal School paid tribute to the memory of Hon. E. C. Carrigan of the Massachusetts Board of Education. Dr. Hagar said,—

Mr. Carrigan was for four years the chairman of the board of visitors at my normal school. He was the youngest member of the board of education, and one of the most enthusiastic members of that body. He began life a poor boy; but through his own tireless efforts he obtained a liberal education, and graduated at Dartmouth college. He entered the field of journalism, and meanwhile pursued the study of law. Skilled with the pen, he also engaged in the teaching of writing as a further means of support, and was thus brought into evening school work. He became a regular teacher, and then principal of evening schools. He was made principal of the Boston evening high school, and served there with marked ability and success. He was a staunch friend of the common schools, and in particular of evening schools. Amid the practice of his profession of the law he still found time to devote himself largely to the cause of education, and he used his influence with legislators as a power for the benefit of schools and teachers. He obtained the passage of the tenure-of-office law; and then in the Boston school board labored for its practical application. As a result of his endeavors, Boston has abolished the plan of annual elections. For his willing and generous services, Mr. Carrigan received the hearty thanks of all teachers. On his return from a business trip to California, and while crossing the Rocky Mountains, he suddenly expired. The cause of education suffered in his death a great loss, for there was in him the promise of still greater usefulness in its behalf.

Mr. George A. Walton, Agent of the Massachusetts Board of Education, spoke in eulogy of Prof. J. G. Scott of the Westfield Normal School, and formerly its principal. Mr. Walton said,—

Mr. Joseph G. Scott was a native of New Hampshire. He was well born and well bred, being the son of a clergyman of distinction in the Methodist church, of which he was from his early youth to the time of his death a consistent member.

A good scholar when he became a student of the Massachusetts Westfield Normal School, he there pursued his studies with diligence and graduated with professional training, which, supplemented by a natural gift for teaching, made him successful in an eminent degree. After leaving the school, he taught the Hitchcock free high school at Brimfield, Massachusetts. From this school he was chosen assistant in the Westfield Normal School. He distinguished himself as a teacher of mathematics and natural sciences. Some departments of the latter he had pursued with Prof. Agassiz at his school at Penikese. His quickness of perception and his patience of research were his distinguishing characteristics.

On the resignation of Principal J. W. Dickinson, to accept the office of Secretary of the Board of Education, Mr. Scott was appointed Mr. Dickinson's successor. Though a position he never coveted, it was one which he filled ably, keeping up the high character which the school had attained, and sending its students, thoroughly well prepared for their work, into the towns and cities of all parts of Massachusetts.

Mr. Scott commanded the respect and won the esteem of all his students, as well as of the entire community in which his life work was done. His death was felt to be a personal bereavement by all who knew him. During the greater part of the time he was principal of the normal school he had to struggle with premonitory symptoms of pulmonary complaints, of which he finally died. In the hope of staying the progress of this disease, he resigned his charge at Westfield and made a trip to Europe. Returning, he spent some time on the Pacific coast and in Colorado, where he finally passed to his rest.

"That life is long which answers life's great end." Such a life was that of our friend. He lived well, was faithful to every trust, and resigned, when called, to accept the rest which his tired nature had so long and with so little hope struggled to defer. He was an honor to his profession, and to all a bright example of holy living.

The report of the Committee on Necrology, thus presented, was adopted by a rising vote as expressing the sentiments of the Institute.

As a further expression of respect for the memory

of the deceased, President Littlefield declared this session of the Institute adjourned.

FOURTH DAY. EVENING SESSION.

Before the evening session at the Casino opened, Prof. Hadley's Maplewood Orchestra played the following numbers:

Gamessa March, Gungl.
Overture La Flandre, Bouillon.
Tête à Tête Waltzes, H. K. Hadley.

At 7:45, Thursday evening, President Littlefield called the Institute to order.

The Temple Quartette, of Boston, rendered Storch's "Now Forward," and, on recall, gave Gilbert's "Old Oaken Bucket."

Hon. Henry W. Blair, U. S. Senator from New Hampshire, addressed the Institute on "THE COMMON-SCHOOL BILL."

Dr. D. B. Hagar of Salem Normal School declared the arguments of the speaker to be unanswerable. This Institute has on other occasions expressed itself in favor of national aid. Without further remark, therefore, he would offer a resolution and move its adoption:

Resolved, That, as members of the American Institute of Instruction, we reaffirm our conviction, heretofore expressed, of the need of national aid to education, and that we recommend to congress the passage at an early day of the "Blair bill," or of some equivalent bill.

The resolution was adopted.

Prof. J. W. Churchill, of Andover, Mass., read Victor Hugo's "A Strange Duel," and, in response to recall, McNulty's "No. 5 Collect Street."

The Temple Quartette, of Boston, sang Genee's "Italian Salad," and, encored, "The Milkmaid."

Letters of regret were read by the Secretary from Hon. W. E. Chandler, U. S. Senator from N. H., from President Harrison, and from ex-President Cleveland.

Prof. Churchill read L. Moseley's "Charity Dinner."

The Institute then adjourned.

The Board of Government immediately held a meeting for business.

The members of the Institute, through the generosity of Hon. Isaac S. Crutz, were entertained at the Maplewood with music and fireworks.

Thus ended a very agreeable and profitable meeting—the sixtieth annual meeting of the American Institute of Instruction—upon which the universal comment is "Many happy returns."

The Temple Quartette, of Boston, which contributed so amply to the pleasures of this meeting, is composed of the following members:

William R. Bateman, 1st tenor. H. A. Cook, 1st bass.

E. F. Webber, 2d tenor. A. C. Ryder, 2d bass.

H. A. Cook, Boston, Manager.

Prof. Hadley's Maplewood Orchestra, which, under the lead of Prof. S. Henry Hadley, Somerville, delighted the audiences with their harmonies, is made up as follows:

S. Henry Hadley, piano, flute. Master Arthur D. Hadley, cornet.

Mrs. S. Henry Hadley, pianist. Lucius Hosmer, clarinet.

Henry K. Hadley, violin. Frank Porter, Cello.

CONSTITUTION
OF THE
AMERICAN INSTITUTE OF INSTRUCTION,

**Adopted August, 1870, as a substitute for the older one, and amended
July, 1886.**

PREAMBLE.

We whose names are hereunto subjoined, pledging our zealous efforts to promote the cause of popular education, agree to adopt the following Constitution :

ARTICLE I.—NAME.

The society shall be known by the title of the American Institute of Instruction.

ARTICLE II.—MEMBERS.

1. The members of this Institute shall be divided into three classes, styled active, associate, and honorary.
2. Any person interested in the cause of education, and recommended by the Committee on Membership, may become an active member by a major vote of the members present and voting at any regular meeting.
3. Only active members shall be empowered to vote and hold office.
4. Any person of good moral character may become an associate member by paying the annual assessment.
5. Honorary members may be elected by the Institute on recommendation of two thirds of the Directors present at any stated meeting of the Board.

ARTICLE III.—MEETINGS.

1. The annual meeting shall be held at such time and place as the Board of Directors shall appoint.

2. Special meetings may be called by the Directors.
3. Due notice of the meetings of the Institute shall be given in the public journals.

ARTICLE IV.—OFFICERS.

1. The officers of the Institute shall be a President, Vice-Presidents, a Secretary, an Assistant Secretary, a Treasurer, an Assistant Treasurer, and twelve Counsellors,—all of whom shall constitute a Board or Directors.

2. The officers shall be elected annually by ballot, and shall continue in office till their successors shall be chosen.

ARTICLE 5.—DUTIES OF OFFICERS.

1. The Secretary shall give notice of all meetings of the Institute and of the Board of Directors, and shall keep a record of their transactions.

2. The Treasurer shall collect and receive all moneys of the Institute, and shall render an accurate statement of his receipts and payments annually and whenever called upon by the Board of Directors, to whom he shall give such bonds for the faithful performance of his duty as they shall require. He shall make no payment, except by order of the finance committee of the Board.

3. The board of Directors shall devise and carry into execution such measures as may promote the general interests of the Institute; shall have charge of the property of the Institute; shall be authorized to publish its proceedings, and such papers relating to education as may seem to them desirable. They shall have power to fill all vacancies in their Board from members of the Institute, and make By-Laws for its government.

They shall have power to vote an annual assessment of one dollar upon the members, except honorary members, that shall be present at the annual meeting; they shall annually elect the following standing committees:

(1) A committee of three, who, with the President, Secretary, and Treasurer, shall constitute the Committee on Membership, whose duty it shall be to report to the Institute from time to time the names of such persons as they may recommend for membership.

(2) A committee of three on Finance, whose duty it shall be to audit the accounts of the Treasurer, and, under the control of

the Board of Directors, to draw orders on the Treasurer for the payment of charges against the Institute.

(3) A committee of three on Necrology.

4. Stated meetings of the Board shall be held on the first Saturday in January, and on the first day of the annual meeting of the Institute.

ARTICLE VI.—BY-LAWS AND AMENDMENTS.

1. By-Laws not repugnant to this Constitution may be adopted at any regular meeting.

2. This Constitution may be altered or amended by a vote of two thirds of the members present at the annual meeting, provided two thirds of the Directors present at a stated meeting shall agree to recommend the proposed alteration or amendment.

BY-LAWS.

1. At all meetings of the Board of Directors seven members shall be necessary to constitute a quorum to do business.

2. It shall be the duty of the Secretary, on application of any two Directors, to call special meetings of the Board at such time and place as the President may appoint.



ADDRESSES.



I.

THE INDISPENSABLENESS OF HISTORICAL STUDIES FOR TEACHERS.

BY REV. E. BENJAMIN ANDREWS, D. D., LL. D., PRESIDENT-ELECT OF BROWN UNIVERSITY.

All will agree that for any teacher, as for any other person, to be well read in history is a very desirable attainment. All will agree that for those of us whose work it is to teach history, historical information is of course indispensable. Such truisms need not detain us. The proposition of this paper goes much further. While there are hundreds of noble and successful teachers whose acquaintance with the past is slight, and while such a lack is graver in some departments than in others, yet all teachers, irrespective of their subjects, will, other qualifications being equal, do their work victoriously in close proportion to their familiarity with history.

Respecting no other branch of study could so strong an assertion be made. I know that the teacher finds all knowledge valuable. In no line can he have too much. He may turn to good account items of information the most alien in nature, from his specialty. Yet language does not depend upon science, or science upon language, or either upon philosophy, as all three do upon history. There is, in fact, but one field of learning comparable with history in importance for the entire round of educational work. It

is literature. But M. Taine has made it clear to all who needed the lesson, that even literature can be understood only in connection with the times of its rise.

A few matters, intrinsically worthy to be dwelt upon in amplifying my thought, I must pass with a word.

One is the mental discipline, incomparable in its way, which proper historical study affords.

Another is the necessity that history should fill a large place in the mental stores of him who is to be, in Bacon's phrase, a "full" man, such as we expect in the teacher.

A third passing remark is, that it takes history to save us from these mortifying anachronisms of statement into which the brightest of us are so liable to fall.

And a fourth is, that we need history in our time as an offset and fender against mere materialism in education.

I now broach a thought which I cannot dismiss quite so summarily. Our teachers should know history in order that they may themselves be, and may train their pupils to be, at once intelligent and ardent Americans. We have in the United States quite enough of the spirit censured by the late Mr. Matthew Arnold, which glories in this and that institution or custom simply because it is American. That sort of patriotism, if any are profane enough to call it such, one can have, all the more easily in fact, being ignorant of history and ignorant of everything. Our need is a self-critical Americanism, that shall improve our national speech, habits, and tastes, according to

the best models of all lands and times. It is certainly possible for a people, as for a person, to learn manners from others, and yet leave individuality intact. Americanism in character I would never surrender or weaken. But let it be a noble Americanism, not a disgusting one. And there is an actual danger beyond this, that, while we scorn to amend our culture by lessons from abroad, we shall lose respect for the very element of our national heritage which is most precious, the political pearl of great price, that this nation was the first of all the nations to find, and that up to date none fully share with us: I mean our ordered democratic constitution of government. We do not duly prize this, and it is mostly because so many of us have never read the history of constitutional liberty. It is not enough to have gone back to the Declaration of Independence and studied our way downward, though that is very much. No history ever enacted is more inspiring than ours. The last century and a quarter here upon these western shores is almost an epitome of time. The educational worth of American history has been greatly under-estimated. By all means let our own national career be better appreciated and utilized in the schools. But that record, only be thorough with it, carries us farther back, much farther back than our first Independence day. Had not England's Great Charter been fought for and won, ours would not only never have availed,—it would never even have been thought of. But *Magna Charta*, too, had its history, its causes—two great taproots of causality, indeed—the principle of order, reaching back to Roman law and absolutism, and the principle of liberty, traceable to the German forest. Now, only

he who knows how long a time it took, and how much blood and struggle it cost, to grow liberty, to get it ready, to make it possible that we should enjoy it,—only he can properly appreciate it. If we are to teach that appreciation in our schools, we must have our hearts full of it by the study of old times.

Even this, however, I postpone in importance to the interest next to be named—the vital office of history in a liberal education. Every teacher ought to possess the most liberal education possible, and no education is truly liberal which does not embrace a good deal of historical learning.

Exhaustive definition of a liberal education would carry me too far from my present purpose, but I wish to lay bare its heart. The essence, the central characteristic, of education is not intellectual: it is deeper. It pertains to character and life. And hard by that inner essence of education, intellectual only in part, is what I call, for lack of happier terms, Vision or Illumination. By this I mean, in a much larger sense, what most men, looking at a small phase or section of it, designate as knowledge of the world. It is that familiarity with law, physical and social, with law in all the spheres, variety, and complexity of its operations, which enables one to feel at home in this world, to be surprised at nothing, and to take things as they come. Now, no other study is the peer of history in communicating this quality. Knowledge of to-day, however rich, diversified, and complete, will not do it. Nor will travel, particularly if you travel without history as your chaperone.¹ This age is but the fringe of time. Itself, in truth, you cannot know without

¹ See Introduction to Irving's "Bracebridge Hall."

tracing it to its origin. But were cognition of the present by itself possible, the attainment would be simply a beginning. The past is greater than the now ; and as you always find a man narrow who has seen his own country only, so must he be, who, though familiar with all lands, has made acquaintance with recent times alone. Education must certainly be modern. Do not understand me to be pleading for mediaevalism in our schools. We want latter-day lessons in every class-room : but let them be lessons that are lessons indeed—training which shall be strong in the concentrated wisdom of the ages. The ideally educated man needs to be full of present light ; but it must be sunlight. Now, a test of sunlight is that it has been long on its way from the original orb, and that that orb itself has replenished its fires from innumerable vanished worlds dashing into it as fuel.

Another indispensable factor in a genuine education is sympathetic discrimination in judgments of men and things. It will not serve the purpose to know, externally, distant and different characters and events. We need to understand them ; and in order to do this we must acquire the power literally to see into the motives of the makers of history, and so feel with them. Only educated historical faculty can bring us this.

I assume it as a point of universal agreement, that liberal education involves some acquaintance with the world's best literature. No one, assuredly, will think of advocating such ultra modernness of culture as would preclude the reading of Shakespeare. But you cannot, properly speaking, *read* Shakespeare without knowing a vast amount of history. The same of the other masters. All the greatest writings—and the

most original of them the most—have been growths out of loam formed, little by little, during the literary æons preceding them.

Not only so in general, but to a very considerable part of the world's best books, knowledge of anterior ages and letters is the express and only key. Many complain that they cannot understand Browning, when their sole trouble is that they have not history enough to unlock him. His "Balaustion's Adventure," for instance, cannot but seem desperately bizarre to one ignorant of Euripides and Greek life. Take another consummate piece of his, "The Bishop Orders His Tomb in St. Praxed's Church." A person must have breathed the Renaissance spirit long and deeply to make anything out of the poem at all. *Romola* is George Eliot's best work, but how many toil through it drearily, or turn from it in disgust, for lack of the historical eyesight to see its beauties and its depths !

And of the world's best art, as of its rarest books, no one can feel the divine power save him who surveys paintings and statuary through history's glass. The whole Madonna cycle—how blind a thing it seems, till you have learned something of mediaeval theology ! Michael Angelo's David, far his finest chiselling, I think, looks very odd to a beholder unaware how scholars in the artist's age used to interpret the biblical description of David as a boy.

How vain and even funny are many specimens of criticism, so-called, in literature, art, philosophy, religion, and conduct, in default of the large look which history gives ! Very intelligent students will rail at serfdom, slavery, feudalism, clerical celibacy, and the absolutism of kings and of popes, as if these things

were always and in the nature of the case as unfitting as they seem to most of us now. In fact, every one of them, not excepting slavery, was at some time or other a help to civilization.

In the age of Saint Louis the cause of absolute monarchy was in France the cause of the people and of God, because feudal aristocracy was there so mighty and so oppressive. This was never the case in England, where aristocracy and monarchy, about equally strong and greedy, were continually at war, giving the people the balance of power. From the fourth century to the tenth, from Theodosius the Great to Otho the Great, the papacy may be said to have been the repository of civilization itself. It alone conserved the spirit of order, of unity, of rule and discipline. It was Rome, all that was left of it, having a probation after death. Out of this unity of the Church sprung, when it was time, a new political unity—that of the mediaeval Roman Empire of the West; and it was the divine errand of Church and Empire together so to weld European society into one that when the Reformation and the Thirty Years' War ruptured both those venerable institutions, their unifying work should remain, as it has remained, in the modern system of international law. It is not a mere coincidence that Grotius's great treatise on the Law of War and Peace, the foundation of the science of international law, saw the light almost at the moment when the first clash of arms was heard in the Thirty Years' War.

Very many Protestants still suppose that before the Reformation the entire Church was, in St. Augustine's figure, a "mass of perdition," forgetting that all the good inspiration to the Reformation came from the

Church, and forgetting, too, that the movement was in great part due to secular and selfish motives. A very popular Catholic view, on the other hand, accounts for the Reformation wholly from Luther's wish to marry, and Henry VIII's to unmarry.

Very crude as well as cruel is the usual Protestant thought touching the men, like Erasmus and Sir Thomas More,—many of them saints, if ever there were such,—who would not renounce Catholicism when Luther did. They bewailed the evils in the Church no less sincerely than he, but were impressed with the value of its grand unity, thinking it meanwhile a less evil for Christendom to be under one ecclesiastical head, elevated by and out of the Church itself, than to obey innumerable secular authorities, usually godless, warring one with another, and using their ecclesiastical lordship for political ends. The history of Protestantism in Germany to this day bears impressive testimony to the foresight of these men, while its career in lands of confessional neutrality, like the United States, reveals that they overvalued formal ecclesiastical unity.

An error precisely the reverse of this prevades our Protestantism. Because, once, due freedom of thought and confession could be had only by rebellion, making schism for the time no sin, but, rather, a virtue, a sort of sacredness has attached itself to our thought of division, which keeps multitudes of excellent men to the work of sectarian fence-building along imaginary lines where the original propriety, if not all propriety, of fences has long since disappeared.

But now, advancing another stage upon our general path of reflection, there is a still weightier reason than the demand for a sound Americanism, a still weightier

reason than the call for a liberal education, involving this vision and this discrimination of which I have been speaking, why history ought to make up an eminent part of the teacher's outfit. I cite you to the historical element which is ingrained, as it were, in the very nature of nearly all objects of knowledge. I do not mean merely that every science, as such, is a growth, so that, to present it as we ought, we must proceed genetically, requiring knowledge of yesterday and the day before. I wish to say, that, outside of pure mathematics, all the object-phenomena of science, those phenomena viewed in the most objective sense possible, involve the element of time.

The best thinkers are only just awaking to a sense of the change which the truth of evolution, accepted now in one way or another by nearly every one, imposes upon the form in which the various items of human knowledge must be held. All finite facts and things have come gradually to be what they are. Naught but God *is*: all else *unfolds*. Every historical character, every institution, every biological form, is a growth. Time is a factor, an integral part, in every sort of scientific reality. Now, as history is the correlate of time, the organon through which alone we can appreciate change and evolution, it follows that we can apprehend nothing intrinsically and as it is, without a measure of versedness in history.

“Rome” means a hundred different things, according to the age of which you speak. So “Greece.” So any special institution or phase of life pertaining to either of those nations. Make a statement about “the Church:” I instantly want to know whether you mean the Apostolic church, the old Catholic church,

or the Papal church. Suppose an inquiry to arise touching feudalism: chance if the whole answer will not turn on the time-question whether (let us say) Merovingian feudalism is intended, or that of the age of Charles the Bald, or the decadent form which prevailed under Philip the Fair.

This thought, though constantly left out of view, is still exceedingly familiar, so far as relates to nations, institutions, and men. More recondite, though no less true or important, is it in its application to the physical universe. Even if you suppose the atom to exist and to be unchangeably the same from age to age, certainly none of its groupings thus remain. Molecular masses ceaselessly come and go, rise and fall, grow and decay, unite and separate. Our earth was not; then it was, but not as it is; its present form it wears less time than it takes to say so; while it hurries to clothe itself anew. Forever turns "the whizzing loom of time," weaving out, piece by piece, the succession of robes which the universe puts on and off, the changing drapery beyond which even the eye of science cannot pierce. Old Heraclitus was not so far astray in declaring flux to be the veritable innermost law of things, and nothing permanent save change itself.

Not only does time thus enter as a determining ingredient into all the matter of our knowledge, but there is a certain set of realities, of which, strictly speaking, no mental notion whatever can be formed apart from time. I refer to what are known as the historical categories. Let me illustrate. I could name a religious denomination which it were quite impossible to define merely by beliefs or practices, because no single belief or practice has characterized its whole course.

Its tenets and its usages have come and gone with years, much as its constituent *personnel* has done. Yet the sect has formed an unbroken unity ; it has been one thing, from its beginning till to-day. There are political parties, both in Great Britain and in the United States, of which precisely the same is true. Now, of a thing like this there can certainly be no logical notion, since all the materials for such are wanting. The unity, and hence the notion, in these and similar cases, is wholly historical. They are historical categories as contrasted with logical.

I know that you will at first esteem all this as excessively dry and unpractical. Dry indeed it is, but in a moment I will show you that it is very practical. Several of the most momentous questions of the day, on which nearly every one of us is expected to be informed and to give instruction, turn for solution upon these historical conceptions ; and no sound thinking upon them is possible that is not soaked with the historical feeling. It is not facility in adducing historical examples which is here required. I am not at this point seeking to set forth the great instructiveness of lessons from bygone times. I am not speaking up for history as a useful lamp upon the road which you would probably after all somehow find in the dark. I am trying to exhibit history as the road itself.

Take a problem of to-day, which is a sample case—that of the right to vote. Many regard or proclaim this as a “natural” right, by which they appear to mean that it is a privilege inherent in man as man. If that is so, all men, everywhere, in all the varying degrees of civilization, possess that right. But in relation to many states of society, contemporary and past,

“right to vote” would be a totally empty title, a phrase, history showing us that such a right, like all concrete rights, is a notion into which meaning has been projected solely by the advance of society in complexity and heterogeneity. Nor this alone. History makes it clear, that, unless we cast aside the law of the greatest good as our criterion, it is only amid rather rare social conditions, where knowledge and self-control are general, that the right to vote is so. Only then, if ever, can we speak of a natural right to vote. This right is natural, therefore subject to all the unnumbered limitations of time and circumstances.

The analysis is the same in the case of the land question, lying at the basis of the George movement. Property in land is not a primordial institution. It grew up. It is a social creation. It was made for man, not man for it. It can therefore be modified, if it is found best to modify it. You or I have a natural right to land in severalty only in the same sense and on the same conditions as we have a right to vote.

All this Henry George argues, and correctly. But, in maintaining commonalty-holding on the other hand to be the sole rightful order, he falls into the very pit himself has digged. Every form of the property right is an historical category, an affair of social creation and growth. We have a natural right to property, be it collectively or be it severally, only when, where, and so far as it is best for the community that we should be permitted to enjoy the sort of control which the right implies. Nor is there a single natural right of any kind, even the right to life, even the right to worship God according to the dictates of one's conscience, of which the same is not true.

DISCUSSION.

MR. W. J. CORTHELL, of Gorham, Me. After hearing the exhaustive, eloquent presentation of the subject by President Andrews, what is it possible for one to say, except an emphatic Amen? Yet a single thought may, perhaps, be presented. It is a trite saying, yet not less true because so trite, that he only can succeed in any work who has perfect knowledge of the material in which he works. As the teacher works in human souls, he must, to be really successful, have knowledge of the human soul; must know its powers of observation, of reason, of imagination; its motive power of passion, and its ruling power of will. It is said, and truly, that the study of the soul must be by introspection; that the student of psychology must turn his attention within; must note all the phenomena of his own mind, the operations of his own intellect, the sway of his own passions, and the decisions of his own will. He must study these manifestations of his own soul, in all possible conditions, since the soul is so largely influenced by its environment. But each human life is limited, narrow in its range of experience. So, to know all the experience of the human soul under each varying condition of life, the teacher, who must be a student of psychology, must be conversant with history that he may know the human soul.

It can hardly be denied or doubted that the study of nature in its manifold forms is tending to materialistic belief. Natural science reveals only matter, and force, an apparent condition of matter. To counteract this trend of thought and belief there is need of historic study, because history reveals phenomena for which

material causes cannot account. In the rise and fall of empires and dynasties, in the advance or apparent retrogression of the race, appear *spiritual* forces, is found a power above and beyond all material force, a power " which makes for righteousness."

Man lives in ideals. This is specially true of man in youth. The end of education is not alone the body and the intellect. It is not enough to aid in developing a vigorous intellect in a sound body. Character is the highest, noblest, only sufficient aim of all culture. In the schools this cannot be secured by direct instruction. Its attainment rests largely in the ideals which are formed in the imagination of the pupil. Hence the teacher must be familiar with all the great and good of earth, that he may be able to present to the pupil, for his study and imitation, the noble men and women who have glorified the race.

II.

THE STUDY OF NATURAL SCIENCE—ITS USES AND DANGERS.

BY WILLIAM T. HARRIS, LL. D., OF CONCORD, MASS.

Natural science, the investigation of nature, is well said to be the characteristic intellectual activity of modern civilization. An acquaintance with the several provinces of nature and their relations to each other has brought with it an era of invention of labor-saving machines. With machinery, man has been to some extent emancipated from drudgery, and the work of this emancipation is going on at an unceasingly rapid rate. There is less hand labor, and more labor of directive power. Man uses higher powers to direct a machine to do his work than to perform the same work by hand; and the machine increases his productions to such a vast extent, that with fewer hours of labor he obtains far more.

By machinery man turns nature against itself: for it is nature in our bodies that makes us want food, clothing, and shelter. Nature furnishes the supply for those wants, but at a great cost of bodily labor. At first, man is bound to nature as her serf, his physical wants obliging him to toil for their gratification. By learning the materials in nature's storehouses, and the laws of natural forces, man becomes able to har-

ness those forces, and set them to work elaborating the supplies of food, clothing, and shelter, collecting them into the world-market, and distributing them to all mankind represented in that market. Thus nature is made to provide for its own wants—take care of itself, as it were—and man is left more and more independent to care for the needs of his immortal soul.

These spiritual needs relate specially to intercommunication. They begin to be supplied when man comes to carry on commerce of material goods extensively. For with the getting of his merchandise the trader gets acquaintance with the manners and customs of men both like and unlike himself, and the most precious part of the load brought home in every ship is the education of its crew through observation of foreign people. The travellers bring home treasures of human experience, and distribute them to their kith and kin. By intercommunication, each man is able to avail himself of the views of life which other people have come to possess. Their observations of nature and man, their experiments in living, in undertaking social combinations, in studying nature, their successes and failures, their thoughts and reflections on these, their ethical discoveries, their explorations of the problems of life as a whole, their intuitions of the divine, their great literature which sums up the net results of their living, knowing, and doing,—all these things belong to the spiritual commerce which rapid transportation brings about.

Natural science indeed has stimulated invention of most marvellous means of preserving and disseminating the wisdom of the race. The arts of writing and printing, added to such devices of intercommunication

as the telegraph and railroad, have produced the modern daily newspaper, which reflects as in a magic mirror the entire world of man's doings, good and bad. Not only may man read as he runs, but knowledge runs after him, and the world holds up her picture to him at every turn.

While a continuously larger proportion of the entire civilized world from year to year enjoy more comfortable houses, more substantial clothing, more abundant and more wholesome food, their progress in these material aspects is not nearly so rapid as in the spiritual phase of participation in the wisdom of the race through the arts of intercommunication.

Natural science, knowledge of nature, has been the chief instrument in all this progress. What are its methods? There are three stages in the development of science. First, there is the observation of things and facts: the scientists must map out and inventory the objects in each department of nature;—secondly, the interrelations are investigated, and this leads to a knowledge of forces and influences which produce or modify those objects that have been inventoried in the first stages of science. This is the dynamic stage, the discovery of forces and laws connecting each fact with all other facts, and each province of nature with all other provinces of nature. The goal of this second stage of science is to make each fact in nature throw light on all the other facts, and thus to illuminate each by all. Out of this arises the system of the whole, and the third stage of science is reached. Science in its third and final stage learns to know everything in nature as a part of a process which it studies in the history of its development. When it

comes to see each thing in the perspective of its evolution, it knows it and comprehends it.

Natural science as a whole is not very old, but it has resulted in an age of invention and productive industry. The third epoch of its development is but begun, and only on some lines of investigation. Is there any question that so great an instrument of human progress should have a prominent place in school instruction?

In order to look at this subject in some of its details, let us consider first the grand divisions under which it falls.

Nature is in time and space, and these furnish, so to speak, the logical conditions of existence for all its objects and all their processes. Matter and movement involve space and time. Inasmuch as the human mind knows space and time *a priori*, and can think out their laws without first having to collect examples and generalize from facts, it has invented the science of mathematics, the most wonderful of the tools of thought in the investigation of nature. Mathematics tells us what must be, not merely what has been, so far as we have experience of it. By its aid man assumes a commanding attitude toward nature. He can announce laws of existence and action which nature must obey. The three angles of a plane triangle are equal to two right angles, and it is impossible for nature ever to furnish a plane triangle with a greater or a less sum for its three angles.

Pure mathematics is *a priori* or independent of experience; it studies what may be called the general form of the possibility of nature. Applied mathematics inventories facts regarding matter and motion

and interprets these facts in the light of mathematics. This forms the science of physics, or "natural philosophy" as it used to be called. With chemistry, which deals with composition and combination, we have two branches of physics, molar and molecular—the science of matter as masses and molecules, and movements of the same.

Mathematics and physics treat of nature as inorganic. Even so called "organic chemistry" treats all bodies as inorganic, and reduces them to their inorganic constituents, and tells us nothing of the organic principle as such.

The first phase of natural science deals with the inorganic; the second deals with organic nature—plants, animals, and formative processes like meteorology and geology, and cyclical processes like astronomy. This is the total survey of natural science. The method of study of the inorganic is chiefly mathematical, and relates to measurement of quantity of matter and quantity of motion, and quantity of force manifested in qualities and movement. The method of study of organic nature is historic—an inventory of things, and a record of their metamorphoses.

Science study in schools, as a matter of instruction, involves, first, the presentation of results, interesting details reached, practical applications, all seen in their relations to the general principles ascertained; secondly, instruction involves the method of investigation. The student learns the methods of making experiments and of verifying results recorded. He learns how, as a specialist, to make additions to the existing stores of science.

By reason of its importance, the study of natural

science should begin quite early in school. But on account of its methods, which require maturity in the student, as well as because of the fact that the study of nature is only a small portion of human learning, it must not occupy a large place in the programme. It is quite sufficient for common district schools to devote one hour each week to the purpose, beginning in the lowest grade of the primary school. This hour should not be divided into fifteen minute object-lessons and scattered through the week, but should be one undivided lesson. In it he should take up in systematic order the important results of science. There should be description, illustration by pictures, models, and natural objects, a conversation with the pupils drawing out what they have already learned on the subject, and a critical comparison made with a view to verify or correct their previous knowledge and thereby teach critical alertness in observation. Pupils should be set to work, illustrating and verifying the results presented in their leisure hours doing the work, and lastly their knowledge should be tested and made exact by short essays written on the contents of the lessons.

Three courses arranged spirally in the eight years of the district schools will be found advantageous. For each child ought to see nature in all its departments, and not sink himself into a specialist in some one department when he has not yet seen all departments. For the lowest three years I have found it best to have for the first year a study of plants, their structure and habits and interesting phases; animals for the second year; for the third year such glimpses of physics as are involved in explaining the structure of playthings and familiar tools and machines, also the phenomena

of the elements of nature. This is the first course taking up organic nature and inorganic.

The second course of three years studies botany more scientifically, learning something of classification and much more of structure ; also learning the useful plants for food, clothing, shelter, and medicine. The second year of this course should take up animals more scientifically, and devote one half the lessons to animal and human physiology. The third year takes up physics or natural philosophy, some experiments in chemistry, and an outline of astronomy. A third course of two years follows in oral lessons the arrangement of topics usual in the text-books on "physical geography" (containing an outline of the sciences of organic nature) for the first year ; and for the second year, a similar outline of the sciences of inorganic nature, such as is found in the usual text-book on natural philosophy.

By such a course of study in the district schools, with one lesson each week for the eight years, each child has learned something of the different departments of science, their systems of classification, their methods of investigation, their applications to the explanation of phenomena.

The question that next arises relates to the psychologic value of the study of natural science. For we have justified scientific instruction solely on its significance as a factor in civilization. It is well known that each branch of study in the schools opens some window of the soul. These are grammar, geography, and history, arithmetic and literature : each one gives some new faculty of observation to the mind of the youth. What, we ask, does natural science give?

First, let us consider the view of the world as a whole that science has furnished, and inquire whether it be a spiritual or a materialistic view.

According to the current evolutionary view, all nature is a struggle for survival of forms. The inorganic forms go down before the organic forms; of the organic forms, the plant serves the animal and yields to him. The animal in turn yields to man. Man, in fact, conquers all nature. Here the law of survival of the fittest comes to mean the survival of individuals that have most intelligence. All nature, it would seem, is a process for originating individuality and developing it into a rational being. Looked at theologically, this is satisfactory. Nature is the creation of souls. It implies, of course, the supremacy of mind, since all its lower processes exist for the production of spiritual beings: they depend on mind, so to speak, and demonstrate the substantiality of mind. Mind is the final cause and purpose of nature. This, again, implies that mind creates nature to reflect it. God creates nature, and through nature creates spiritual beings who participate in His blessedness. Here nature presupposes a God of grace and good-will towards His creatures.

This, I repeat, is satisfactory as a world view, and it harmonizes with the view taken in religion. But it does not follow from this that the methods of science-study have a spiritualizing tendency, and, in fact, the opposite is the case. The method of external observation is sharply in contrast with the method of internal observation or introspection. When we look within, we behold self-activity, as feeling, thinking, and willing: when we look out upon the material world with our sense-perception, we seem to see that every-

thing is under fate or external necessity. Everything, in short, is regarded as having an environment of outside conditions or relations, upon which it depends. The totality of its conditions completely controls it and makes it what it is, and necessitates all its changes. Fate, or necessity, prevails universally, according to such a view. But this is the view taken by external observation.

The category of quality, according to philosophy, is that form of thinking which looks upon everything as related to other things, each thing as dependent on an environment. This we see is precisely the attitude of external observation, and external observation prevails in the practical work of the natural sciences. Quality is not the only category used in natural science : that of quantity is also used, and to some extent also others. Quantity regards everything as one and many, or as unit and aggregate of units. Each quantity is composed of like units, and is therefore divisible ; it is also one unit of a number of other like units which form an aggregate.

In natural science each object is regarded according to quantity as an aggregate of like parts and as a part of a larger whole. Quantity is thus a form of thought which is specially characteristic of external observation, because it deals exclusively in externality, and ignores internality entirely. For each thing is part of an external aggregate or larger quantity, and it is likewise itself an external aggregate of quantitative parts external to each other.

Now, if one will take the trouble to consider how natural science does its thinking with these two categories of quality and quantity, he will be led to expect

from it a denial of self-activity in all its forms. He will understand how it is that natural science is sceptical of spiritual truths, and ready to deny the doctrine of souls or minds as independent, immortal existences. If it does not go so far as to deny spiritual entities, it will at least be agnostic, and affirm the unthinkable-ness of such entities. For how can it think any self-active being with such categories as quality and quantity? "All beings are what they are, and they move or change as they do because impelled by their external environment, the totality of conditions." This is its view of the world, and to assume any self-active being is to deny the absolute validity of quality and quantity, and affirm that there is being which is neither qualitative nor quantitative. For a self-active being originates action itself, and it does not act because impelled from outside. There are many forms of self-activity—the plant, the animal, and man, and besides these the divine. The lowest form may be characterized as follows: The plant has life; it reproduces its species and sustains itself by nutrition; it grows. This is self-activity, first, in the form of reaction on environment, and, secondly, of assimilation or digestion of the external material seized or appropriated by the plant in its reaction. Omitting for the present a consideration of the animal, human, and divine forms of self-activity, in so far as peculiar and different from that in the plant, let us stop to inquire how science with its categories of external observation deals with self-activity in the plant—what account does it give of it?

True to its categories of quality and quantity, natural science limits itself to observing and recording all

relations of the plant to its environment. It carefully measures these so as to give the accuracy of quantitative statement to its results. It investigates how much heat and how much moisture are required as conditions of growth of the seed. It determines what shall be the character of the soil in which such a seed will germinate. These are the negative conditions.

Without so and so much heat, moisture, and sunlight, without such and such kinds of soil, the self-activity of the plant will not manifest itself. Given such and such favorable conditions, and the energy of the plant can act and appropriate for itself portions of the surrounding air, moisture, and soil, and, after stripping off the forms that they bring with them, the plant stamps them with its own form of vegetable cell and adds them to its own structure, and grows or increases in size.

Presented in this way, it seems to me that any one may see already that the plant's action is self-activity. The environment may act as much as one likes, but it will not be claimed that the environment brings its material to the plant, and then detaches some portions of it which it causes to enter the plant; still less will it be claimed that the environment acts negatively on itself, to destroy its own form and put on the form of vegetable cell of the precise shape, size, and composition of the plant which it enters. Each plant stamps its own individuality on its cells, so that if a collection of the cells of one plant be engrafted into another plant, the graft will produce the fruit of the original plant that formed it. So of seeds;—an acorn produces an oak or nothing; the seed of a cucumber manifests its self-activity by converting its nutriment into cucum-

ber leaves, vines, and fruit. No change in the environment will produce a cucumber from an acorn, or an oak from a cucumber seed. If a change in the environment, skilfully applied for a long period, develops fine apples from the sour crab-apple, we reason that the causal energy is in the plant, which, being relieved of the waste of its power upon stubbornly resisting elements of food, has more strength to expend on building up its ideals. To consider the progressive development of a plant due to outside influences, is to suppose that the environment of the improved apple-tree contains the energy that prefers choice fruit to our crabs.

Outside action may be said to assist development, because it may be something to destroy or break down the stubborn individuality of the elements of the environment that serve as food for the living plant. But it cannot be said to assist directly ; it cannot furnish organizing power ; it cannot build, like the life-power of the plant ;—it can only tear down ; it can assist only as the mill assists man's life, by grinding his corn for him and saving him so much expenditure of vital force as would be required to grind the corn with his molar teeth.

These things may seem too simple and clear to need argument. It may seem that the scientific mind, how much soever it may be inclined to follow its categories of quality and quantity, would never hesitate to acknowledge that there is self-activity in the plant. But the mind, disciplined solely in obeying dependence and external relations, becomes of the opinion that it is not necessary to assume self-activity to explain anything in nature. All may be explained by outside

influences. The scientist accordingly looks always further for new steps of mediation, and hopes to find how disintegrating processes, such as decay, for example, may liberate the force which supplies the living being with the energy to build the new organism. Under this vague and indeterminate concept of *conservation of energy*, he conceals from himself the necessity of the hypothesis of a soul in order to explain the processes of life. It is all a matter of "transformation of energy," according to his view. Retrogressive metamorphoses liberate the energy that is required for progressive metamorphoses. The decay of rock formations sets free the energy to build plants; the decay of plants furnishes vital form for animals.

But in this theory the scientific mind has deceived itself. Force is made to account for the vital energy only by leaving out of sight the need of directive power. All of the force used in life to build with is said to be transformed force that has been derived from without. But what transformed it? What deprived force of one shape and imposed another shape upon it? To change the direction of a force certainly demands another force. And we must see an energy in that entity which collects forces from its environment, and puts them together and builds vital functions with them; that restores what is wasted and that stamps its ideal form on every particle of matter, making it into a vegetable or animal cell. To turn a force out of its direction demands another force; and to transform forces from formative energies of one order, say of crystallization, into formative energies of another order, say of vegetation, must require great stores of directive energy.

This is the place where the materialistic and dynamic theory of life falls through. It attempts to explain all things by mechanism, external constraint. But this is inadequate to explain adaptations for individual purposes. An individual, or a being for itself, which appropriates environment and transforms it to its own ends, is not the result of a fortuitous concourse of atoms, nor of a sequence of blind forces. Mechanism consists in external constraint from which design, purpose, and all forms of self-activity are absent. To suppose that forces are so correlated that each one is used as a means to some end, different from any one of the members of the system correlated, is to imply a directive energy, possessing individuality and identical in attributes with what has been defined as soul.

In the study of plant life we discover self-activity in the form of assimilation of food from environment. In the case of the animal, we have, in addition to the assimilation processes, new forms of self-activity more remarkable, namely, feeling and locomotion. In locomotion, the self-activity appears as originator of movement in matter ; while in feeling, it shows power to reproduce within itself the essential form of its environment. In feeling, the animal becomes its own environment, or repeats its environment ideally, and thus manifests a higher capacity for freedom than the plant shows.

In man, this self-activity is developed beyond feeling to the perfect forms of thought and will. In these man frees himself from the meshes of fate ; for he does not allow himself to be limited by real being; as it is, but conceives ideal forms of being which he desires. These desires as motives he actualizes by his

will. In these, he is doubly free, doubly a cause,—first, a cause in thinking an ideal as a motive, for a motive is not a real but an ideal formed in the mind; secondly, a cause of the actualization of his motive or ideal through his will.

Even the animal shows the action of motives as impulses: the animal as a feeling-being sees ideals to some extent, or else he never would act as he does. The plant is guided by ideals, though it does not feel or think them. In man, the ideal exists as an object for itself, for man can see ideals of sense-pleasure, ideals of beauty, and, finally, ideals of ethics. In the moral ideal, man sees the form of the divine as a necessity elevated entirely above physical necessity—a necessity addressed to the mind as ideal—and hence a form of freedom. The moral is the ideal form of freedom.

Natural science, with its predominant use of the categories of quality and quantity, therefore fails, in the departments of organic nature, to comprehend the plant and animal; and it fails still more signally to recognize the spiritual in man. But the principle of evolution coming to be generally adopted, does not encourage this exclusive use of the quality and quantity points of view. Evolution urges on the mind to final causes or purposes, and this will be found corrective of the present vicious trend in the method of scientific thought.

While, therefore, we must acknowledge the importance of science study in the elementary schools, we must not ignore its non-spiritual tendency due to exaggerating the importance of inventorying external facts. Its enthusiasm for things and events in time

and space makes it undervalue facts of introspection which are more fundamental than facts of external observation. Self-activity is as truly an object of internal observation, as a thing conditioned by its environment is an object of external observation. Moreover, this internal fact of self-activity has to be used in external experience in order to recognize living being of any sort. Without the concept of self-activity, no one would ever come to observe any living beings whatever.

Now, the corrective for such studies as lay too much stress on external observation is found ready at hand in the studies of human nature. These are philology or language-study, history or the study of the human will acting to form institutions, and literature as the symbolic presentation of human nature in its entirety. Religious literature, of course, touches the problem directly, and offers to the individual, in the form of authority, the spiritual theory of the universe. But literary art, grammar, and especially history, are spiritualizing in their tendencies, and furnish the antidote for the materialistic tendency of scientific instruction in our schools.

DISCUSSION.

A. P. STONE, LL. D., of Springfield, Mass., rose to define for New England the term "district school," which Dr. Harris had used in the Western sense of a group of grammar and primary schools. Its New England usage is, rather, confined to the designation of the rural ungraded school.

MR. LEMUEL S. HASTINGS, of the Claremont, N. H., High School. He followed an independent treatment of the theme, which did not altogether agree with Dr. Harris's position. He was, however, glad to hear emphasized the importance of beginning the teaching of natural science in the lowest grades. All evil that it was feared might come from such a course could be traced back to incorrect methods. He believed this study could be profitably pursued in all grades, from the kindergarten to the university. But there is need of improvement in the qualification of teachers for this work. They must be able to teach accurately and scientifically, although it should not be expected that they teach thoroughly in detail. The profitable results accruing from this study are many-fold. Besides cultivating perception, reason, and judgment, more purely intellectual faculties, it also assists in chastening, correcting (not stimulating) the imagination. How fancy runs away with children! Dr. Holland, in one of his books, gives us a bit of personal history, which shows very clearly how a child prone to imaginative speculation soon becomes, unconsciously, unable to distinguish between fact and fiction. This faculty should be held down, and made to subserve accurate and precise observation and clear thinking. This study of natural science often brings out in a pupil powers of great benefit to the community that might otherwise remain latent, and, indirectly and incidentally, it helps to cultivate the aesthetic nature and also to strengthen the will power.

LARKIN DUNTON, LL. D., of Boston, continued the discussion, but rather in extension than in criticism

of Dr. Harris. He said that the child's concepts of the outer world ought fairly to correspond with that world. The pupil must observe. He observes types, and he must get them from nature. It has been too much the fault to study nature in the absence of nature. Nature is easily approached in the country. If, however, city classes should attempt to provide themselves with natural specimens, particularly in the study of plants, the city and its suburbs would look as desolate as a tree stripped by caterpillars. He told of a city which had adopted a plan to remedy this defect. It laid out its school programme and all details of study, and then made a garden, out of which it supplied all its classes with suitable specimens for observation. Analysis was followed by detailed blackboard description, and the object-work by reviews of the lesson. This condition of science-work is essential. If it is not present, better abandon the second stage of this work. Difficulties were less in case of minerals, and greater in case of animals, than in the supply of plant specimens. The alternative is to direct the pupil to observe outside of the school, and report his observations. Economy is to be met by limiting a given subject to a particular grade and time.

MR. C. W. PARMENTER, of the Cambridge Latin School. In that masterly way which characterizes all his work, Dr. Harris has explained the advantages of scientific study, and has pointed out clearly the direction of its dangerous tendencies. He has also shown that the right study of language is calculated to counteract these tendencies. Is it not pos-

sible that we have dwelt so much upon the idea of translation, that we have overlooked the rare opportunities afforded by the classes in elementary science for right training in language? In all of the better schools, laboratory methods are pursued to such an extent that pupils gain knowledge of a large number of scientific facts and principles by the exercise of their own powers. The effort to state these ideas correctly yields the most valuable discipline which the study of language affords. In describing experiments, recording observations, and stating principles deduced from laboratory work, pupils may gain a discipline not less valuable than that which results from translation. Knowledge of facts and principles is comparatively worthless if one does not possess the power to express his ideas in accurate and appropriate language.

It is highly important, also, to be sure that the language used conveys clear ideas to the mind of the pupil. Many boys state in faultless language the definition of a dyne, without comprehending at all the value of this unit of force. What is true in this case is true in hundreds of others.

Most of us can never hope to think and write like Dr. Harris and Dr. Dunton, but in the daily work of the class-room we can all give pupils greater command of language, and be certain that the language which we accept conveys clear ideas to the mind of the pupil who uses it.

III.

NATURAL SCIENCE FOR THE COMMON SCHOOLS BY EXPERIMENTAL METHODS.

By JOHN F. WOODHULL, PROFESSOR OF NATURAL SCIENCE IN THE
NEW YORK COLLEGE FOR THE TRAINING OF TEACHERS.

[AN ABSTRACT.]

In the Scientific Department of the New York College for the Training of Teachers, we are making a careful study of the question, whether it is practicable for common schools to give science lessons by experimental methods, in every grade, from the first year of the primary to the last year of the high school.

We have classes of pupils in all grades in what is called our Model School, which have a certain portion of their time allotted to the scientific department, to be used as the head of that department may see fit. Apprentice teachers from the college are put in charge of the work, so that the conditions may be, as nearly as possible, like those in the public schools.

[Here experiments were performed as samples.]

In primary and grammar grades, the experiments have been performed by the teachers in the presence of the pupils, and their observations have been elicited by questions. Pupils have been allowed close exami-

nation of the objects, by having them passed about from hand to hand.

It has been our object to train the children in the use of their senses, and open those avenues through which their minds must acquire a knowledge of nature. We have therefore chosen such experiments as would give special training to the senses of seeing, hearing, smelling, tasting, and touching. We have made use of the familiar, every-day objects which chanced to be nearest at hand, which cost very little money, and very little time and skill for manipulation.

Our apprentice teachers, who have done this work for the primary and grammar grades, have spent one hour and a half per day, three days in the week, for a whole year [This includes the work with the class—forty minutes twice a week—and the laboratory work in preparation for the class] performing the experiments at an average cost of only *two dollars* for each teacher.

While this amount must vary with circumstances, it is believed that it fairly represents the necessary expense of conducting observation lessons, by the experimental method, in a primary or grammar class, for one year.

We have directed the attention of the children to objects of every-day interest, not so much with the idea of loading them with facts, as of arousing their curiosity and begetting in them inquiring habits of mind.

The custom is very prevalent, where science lessons are given in lower grades, of pouring in facts, and requiring the children to memorize certain formulated doctrines, of which they can have no adequate conception; and however fundamental they may be

as scientific conclusions, the children cannot be considered to be prepared for them. . . .

In the high school department, we begin systematic scientific instruction for the purpose of developing careful habits of experimenting, careful habits of observing, and careful habits of reasoning. In this department, as in the others, those experiments were selected which would cost the least money and least time for manipulation; which would be the simplest to understand, and would most directly illustrate the principles.

[Here experiments were performed as samples.]

We have reached some radical conclusions with regard to science teaching in high schools.

Lack of funds makes it impossible for the average high school to be sufficiently equipped with apparatus from the markets to teach the sciences by experimental methods, and yet we find in this no cause for despondency. Although having abundant means at our disposal, we have purchased very little apparatus from the markets, believing that it is inefficient for purposes of demonstration, because most pupils of high-school age fail to comprehend the machines, and their minds are only confused thereby with reference to the principles. We have taken care that our experiments should be so simple that the pupils might readily understand them, believing that artificial experiments, intended to explain natural phenomena, ought not to be more incomprehensible than the phenomena themselves.

We have made great use of familiar objects which chanced to be nearest at hand, for purposes of demon-

stration. Our pupils have been taught to construct their own apparatus, so far as there seemed to be educational value in that sort of work ; and in most cases the products of their work unquestionably fulfil the purpose for which they were constructed much better than the conventional apparatus which, expensive and cumbersome, usually has no better mission than to occupy a show-case. Our high-school pupils have studied science in the laboratory by the experimental method, working one hour and a half per day, three days in a week, for a whole year, at an average expense of *three dollars* for each pupil,—which expense the pupils themselves have cheerfully borne in order that they might possess the apparatus which they had made. . . .

The apparatus which is appropriate to be used in most of the experiments for the high school department is that which is sometimes called “illustrative apparatus:” a large part of it should be “home made apparatus.”

The mistake is frequently made of supposing that this is intended to illustrate the apparatus of the markets—to merely take the place of a cheap substitute. Nothing could be more erroneous. Its purpose is to illustrate scientific principles ; and in most cases this does not require any imitation of the apparatus so much in vogue in show-cases.

Teaching science by the experimental method prohibits our undertaking to cover so much of the subject as is mapped out in the usual high school curriculum. Nothing could be more impracticable than to undertake to teach, by the Baconian method, the whole of zoölogy, physiology, botany, physics, chem-

istry, astronomy, and geology, within the ordinary limits of a high school course. The time allotted to the study of science should not be distributed over such a vast field. The habit of cramming all the facts of a text-book of science should be as loathsome to teachers and school authorities as it is to pupils. It is the business of the school to show the pupil how to study nature, so that through life he may go on to acquire knowledge. To this end quantity must be sacrificed to quality, and the teacher must not be trammelled by a course of study except in the time allotted. The amount of subject-matter which the pupils attempt to grasp must be diminished at least one half. Too much of the science teaching is beyond the comprehension of the pupils. They cannot retain interest long in that which they do not grasp. Not only must the amount of knowledge which is presented to the student be diminished, but it must be greatly simplified. Pedantic essays about Nature's laws, delivered by youthful graduates, are the natural outgrowth of a course of instruction which is as abstruse as it is pharisaical.

It is hard to conceive of a more unscientific method than that which prevails so generally, of performing experiments in a hasty, slip-shod way, and attempting to make up for their deficiencies with pedantic explanations.

Careful habits of performing experiments, as well as careful habits of observation and careful habits of reasoning, cannot be cultivated where such haste is required to cover a large amount of subject-matter.

Our final conclusion is, that patience and a love for the work are the most essential qualifications for the

teachers. With these, and with freedom from unnecessary restraints, however meagre other equipments may be, *science may readily be taught in the common schools by experimental methods.*

DISCUSSION.

MR. ARTHUR E. GOODRICH, Principal of the Salem, Mass., High School, criticised some of Prof. Woodhull's statements. He was bewildered by them. Much of the apparatus condemned by the professor was rarely if ever used. The simple apparatus was in vogue. He also arraigned the statement, that shallow knowledge could be the proper equipment of any teacher. Training in the use of apparatus was especially important in city schools, where the pupils, if more intellectual, were less skilful with their hands than country boys. Let them learn to make their own apparatus.

PROF. WOODHULL replied, that an instrument-maker had told him that "*fountains in vacuo*" were extensively ordered: if not to be used, so much the worse. He would say that teachers in every grade ought to be well equipped with knowledge.

HON. GEORGE A. WALTON, agent of the Massachusetts Board of Education. The essays and discussions to which we have just listened are appropriate and timely. Professor Louis Agassiz came to this country to introduce into Harvard University the scientific study of nature, particularly in the direction of Geology, Mineralogy, and Zoölogy. He declared as his conviction, after years of experience, that it was

impossible to have scientific men in this country, for the reason that the student came to the age when it is possible to study science wholly ignorant of the facts which are the occasion for scientific knowledge, and wholly untrained in the observing powers through whose exercise alone the facts can be known.

When the student came to him the deficiency was remediless, for the student had already passed the period in his mental development most favorable for the development of his powers of observation. Moreover, to acquire a knowledge of the facts, even in an imperfect manner, consumed the time demanded for the generalizations involved in scientific study.

It is now proposed to do what Agassiz saw to be a necessity, namely, to apply the remedy lower down, and introduce into the schools of the lowest grade—into all elementary schools—the study of nature by the objective and experimental method. But here presents itself a serious objection: these are new studies to be added to a course which is already over-crowded.

The real difficulty is in the course of studies, which is at present based upon the acquisition of knowledge as the end of education. So long as this notion prevails the course will be over-crowded, and nature will be thrust aside. The true end of education is culture. When this notion comes to prevail, the study of the objects in nature will be brought into the schools as a necessity. We have now in the schools no attempt to train the powers of observation, which are the powers first in the order of development, for the reason that the things that are now almost exclusively studied, present little occasion for this training.

In his creation, God has provided these occasions

everywhere,—in the plant, and animal, and mineral structure. When we abandon our artificial scheme of education based upon knowledge and make the prime end of education human culture, then will the study of nature become a necessity, for not only are her resources abundant and at hand, but nothing else that can be devised will afford the training. More than this: when truly studying nature, we are in search for the truth, for the thought of God himself. So that the study of nature affords not simply the only occasion for the most elementary training, but it becomes the occasion for the most ennobling and exalted forms of human culture.

May the day speedily come when it shall be seen that education is not for knowledge, but for culture: then will tests for the increments of knowledge possessed cease to torment the teacher and perplex the child. Not, What does the child know? but, What training has he had? will be asked. When that time comes, there will by no means be less knowledge, but, rather, more; then will it be possible to have scientific men in this country.

One criticism I deem it important to make, and that with due regard for the able persons who have discussed the topic under consideration. It seems unfortunate that the term science should be applied so indiscriminately to what in the main is but elementary. Agassiz made the proper distinction when he said it was impossible to have scientific men in this country, for want of the teaching in the lower schools of facts, and the training of the observing powers. Such a distinction is implied in any rational theory of education.

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We gave but a few hours where we should have given as many days to this place of historic fame.

The day following my trip to Chester I went to London. On this journey of one hundred and eighty miles I was deeply impressed with the charm of English country life.

England has the prestige of age, and her natural beauties have been perfected by such finishing touches of art as time and wealth alone can bring. The roads are broad and hard; the fields, bordered with flowering hedges, roll out into the horizon with luxuriant crops and deep green grasses; the villas, or the castellated residences, are reached by a winding way under the deep shade of venerable trees; meadows, prodigal in the promise of golden harvests, spread wide on either hand; the rich pastures are dotted with flocks of long-wooled sheep and herds of blooded cattle, and swans and boats are seen floating upon the waters that glimmer and sparkle in the sun.

These ancestral estates of the landed proprietors are homes of ideal peace and comfort. If the whole population enjoyed such luxuries, the invitations to a celestial life would lose something of power. But, alas! the lowest poor, who eat bread in the sweat of the brow, too often live in a comfortless hovel of one room, without hope of lifting the children of their love above rags and hunger into the sphere of virtue and aspiration. These cruel inequalities of life under a free government spring from a failure to recognize practically the rights of men in the social and industrial organizations of society. They are a survival, below the plane of politics, of the pitiless wrongs of the people, which characterized the old ages of arbitrary power. The

causes of poverty and misery in the organic structure of nations will never be eliminated till the brotherhood of man becomes the foundation of the state and the controlling spirit of its laws.

The morning after reaching London I went down to Oxford Circus, and taking a seat on the top of an omnibus started for the Bank of England. We passed down Cheapside, a street made famous by centuries of thrilling history, to Threadneedle street, which passes in front of the principal entrance to the bank.

I observed on my way down a sign which read "Dombey and Son." Whether this firm furnished a name to the great work of Dickens or not, I do not know, but the "Green Dragon Hotel" on Bishopsgate street, at which I dined, must, I am confident, have been an original of the realistic pen of the great novelist. The keystone of the arched entrance is a green dragon; on the right, as you pass under, is the "tap-room;" before you an open court surrounded by buildings, around which runs an open gallery; and at the further end of the court is a stable, into which one can imagine Sam Weller driving his stage-coach, while the attractive widow of whom the elder Samivel told the younger Samivel to "beware," smiled down upon him from the gallery above.

On reaching the Royal Exchange in front of the bank, I went to the office of the London branch of the house of Morton, Bliss & Co. There I met Mr. Morton and Sir John Rose, who, after an agreeable chat on home matters, sent a clerk with me to inspect the greatest monetary establishment of the world, "The old lady of Threadneedle St." The building is long and low, and covers eight acres. It is without windows, and has the

appearance of being a prison ; but within, it is splendidly lighted by nine open courts in which are fountains and ornamental gardens. In the Drawing Office is a clock with sixteen dials, each seen in a different room. There is also a great variety of ingenious and delicate machinery for weighing coins and printing bank notes.

The bank was founded in 1691 by William Patterson, a Scotchman, who provided that no Scotchman should ever be employed in the establishment. It requires a thousand persons to discharge all the functions of the bank, at an expense of two hundred and twenty thousand pounds a year. Although it is a purely private institution, the government has committed to it the entire management of the public debt, amounting to nearly eight hundred millions of pounds. It transfers the stocks, collects the income tax, and pays out the dividends, and receives for this responsible duty a commission of two hundred thousand pounds. The bank has the privilege of issuing notes payable on demand, and the value of these notes is kept from depreciating by a constant reserve, in addition to government and other securities, of twenty millions in bullion. The capital of the bank, which was originally only one million two hundred thousand pounds, has advanced to fourteen million five hundred and fifty thousand pounds, so that the great fiscal agent of Downing St., sitting in its short, narrow lane, has the power to affect the business destinies of the world.

In the open space in front of the bank is a marble statue of the queen, and a bronze equestrian statue of the Duke of Wellington. In the rear of the Royal

Exchange, which is at one side of this quadrangle, stands Story's splendid statue of the celebrated American banker, George Peabody. Directly in front of the bank, but on the opposite side of the square, is the Mansion House, the official residence of the Lord Mayor. Thus the chief agents of the business, and of the social life and political power, of the great metropolis of England have gathered around this small area, through which there flows each day a tide of human beings more numerous than moves over any equal space upon the globe.

A short distance east of the bank, and just outside of the limits of the old city, stands the White Tower, which originated the expression "The Tower," though that term now includes much more than at the first. William the Conqueror erected a fortification, in 1066, on an elevation just east of the walls, to defend his usurped authority against any uprising of the city. Twelve years later he built what is now called the White Tower, with turrets at the four angles. During the absence of Richard *Coeur de Lion* with the Crusaders for the recovery of the Holy Sepulchre, the chancellor, Longchamp, Bishop of Ela, who had control of the government, built a wall and threw up a ditch around the fortifications, and these, from time to time, were extended till they enclosed the whole hill of twelve acres.

Within this fortified wall streets were laid out, and forts, castles, and houses were erected, till at last a small walled town was covered by the designation "Tower."

We entered the walls through fortified gates, and were shown through the ancient abodes of royalty,

used since the days of Elizabeth as prisons, and as places of security for the precious regalia, worth fifteen million pounds, and for the arms and treasures of the crown.

In the old chapel of the White Tower are preserved many valuable state papers, and in other apartments precious trophies of great victories and civil triumphs. In the Spanish Armory we see a figure of Elizabeth standing by her horse, in the very armor she wore at Tilbury when she made her celebrated speech to the army. In one room are stacks of arms sufficient for an army; in another, as we are told, the sons of Edward IV were murdered.

No spot can speak with more terrible eloquence of the glory and shame of English history than the Tower. Upon this Golgotha of British politics fell Walter Raleigh, Archbishop Laud, Lord Dudley, Harry Vane, Thomas More, Algernon Sidney, Lady Jane Grey, and many others.

But let us turn from this scene of blood to a temple of the Prince of Peace, the stupendous and impressive Cathedral of St. Paul. This is the most magnificent monument of architectural genius in the kingdom. The spot on which it stands has been hallowed ground for eighteen centuries. The early Christians reared a church here, which was destroyed in the persecutions of Diocletian; a second, erected in the reign of Constantine, fell by the hands of the Saxons; a third, reared in 610 by Sebert, the first Christian monarch in the Saxon line, perished by fire; and the fourth, the far-famed "Old St. Paul's," went down in the great conflagration of 1666. The present splendid structure rose like a Phoenix from the ashes of the past. In

this, the spirit of Christopher Wren seems to bid defiance to time and the elements.

As we pass through its high portal and stand by its springing arches ; as we lift our eyes far up to the pictured dome that bends like another sky above us ; as we realize the dim vastness and the solemn stillness of the place ; as we reflect that beneath the pavement sleep the ashes of Wellington, Nelson, and a host of the other mighty men who have made England's fame and power,—a sense of religious awe comes over us, and we pass quietly out from this group in marble and bronze of England's illustrious dead, into the distracting turmoil of the great metropolis. Moving into Fleet street, we are soon pressed by a throng of memories of Dryden, Ben Jonson, Sam Johnson, Milton, Chatterton, Goldsmith, and other of the immortals who greet us as we pass their old haunts on our way to the "Temple." This old Norman church is less grand and imposing, but more exquisitely beautiful, than the Cathedral, and possesses a far deeper interest for me, as it is associated with those matchless knights of the age of chivalry whose marvellous deeds kindled my youthful imagination, and are peerless still in my galaxy of ideal heroes.

The Temple church took its name from the Knights Templars, who had their head-quarters in the Inns of Court from 1184 to 1313, when they were overthrown, and their property passed to the Knights of St. John. When these militant religious orders were dissolved, this vast estate reverted to the Crown, and in 1608 James I conferred the freehold on the Benchers of the Middle and Inner Temple, and their succes-

sors forever. Thus it came about that this splendid property,—the two Temple Halls, the Temple gardens in which were plucked the red and white roses that represented the houses of York and Lancaster, and the Temple church with its lofty columns and fretted arches, and the old warriors that fought for the Holy Sepulchre, at rest beneath its sculptured floor,—came to be the property in perpetuity of the disciples at common law.

Not far away stands a yet more ancient church, the venerable Abbey at Westminster. This old gothic pile, with its long-drawn aisles and costly chapels, with its carved ceilings and royal shrines, is the growth of centuries, and yet all the successive parts seem in consonance with a general unity of plan. As the exquisite frost-work upon the winter's pane, shooting into vagrant and unlooked for forms of beauty, is held by a mysterious force of law to a pleasing harmony of parts; as the forests, each after its kind, unfold in the lapse of years, by a wild luxuriance of growth, into the glorious forms of arborial loveliness and majesty by a power that correlates the countless variety of limb, leaf, and flower into a matchless harmony,—so the genius of architecture has controlled the work of successive generations upon these old Christian temples, and maintained a faultless unity of type amid an endless multiplicity of detail and ornamentation.

Westminster is the sepulchre of kings, and the necropolis of England's historic dead.

Here, in peace at last, sleep side by side the kingly Elizabeth and her frail but beautiful victim, Mary Queen of Scots. Here in this splendid mausoleum,

kings and queens, warriors and statesmen, orators and poets, great thinkers and great doers, receive in death a grateful tribute of honor from the nation which, living, they honored.

But it is not splendors of architecture nor artistic decorations,—it is not the gorgeous insignia of royalty, nor the costly memorials in marble and bronze of the famous dead,—but the seeming presence in the hushed silence of these dim and shadowy aisles of the master spirits whose dust is beneath its floor, that gives to the old cathedral its strange fascination. A sad but pleasing hallucination takes possession of our imaginations, as, surrounded by the visible evidences of mortality, we muse upon the monuments of departed greatness: we cannot entirely divest our minds of a sense of the unseen shades of the immortals haunting the corridors and lingering about the altars. To be loud or profane at Westminster Abbey were impossible, for it is a hallowed trysting-place between the living and the dead.

By fortune, or misfortune, I listened to a sermon in the old minster by Dean Stanley. As a thinker and writer his fame is established, but his speaking, tested by any standard of oratory, was abominable. His manner was awkward, and his speech hesitating and hitchy beyond the usual stuttering style of English elocution. The shadows of the monuments of Mansfield, Chatham, Pitt, and Fox fell upon him, and he stood above their ashes; and such speaking was unpardonable in one who believed in their continued conscious existence. It seemed to me that the dumb lips of their statues, even, must open and bid him be still. There, too, the great singers of England, whose

songs are still ringing down the ages, were listening, if the dead ever listen, from the "Poets' corner." How with his divine theme and in such a presence he could be other than eloquent, I could not conceive.

This was in striking contrast with a sermon I heard from Spurgeon.

Crossing the river one Sunday morning, I went early to church and took a seat in the gallery, just over the pulpit, where I could watch the action and catch the intonations of the preacher, and observe the effect of his words upon the congregation. It was an occasion of unusual interest. The services were informal, and nothing seemed done for effect. The sermon was simple, earnest, and direct, and the great congregation sat spellbound from beginning to end. At the close, I attempted to analyze this effort and to account for its effectiveness, but found it no easy task. Spurgeon has great physical vigor, overflowing enthusiasm, and wonderful facility of illustration, but in strength of thought, in dramatic power and pulpit oratory, he fell far short, that day, of some of the greatest American preachers. His great and continued success, as it seems to me, is due to his transparent sincerity, and to his absolute devotion to his Master and his work. Spurgeon is lost sight of. He is not preaching for personal glory or emolument, but for the salvation of men. All who hear him realize that this is his impelling motive and the source of his inspiration. Working in the apostolic spirit, his labors are attended with apostolic success.

Some distance north-east from Westminster, in City Road, stands a small, plain structure resembling an

old-fashioned New England meeting-house. This is the church in which the two Wesleys and the eloquent Whitefield used to preach. Reflecting upon the great crowd in successive generations of my own countrymen who would rise in judgment as witnesses for these noble men, it was with mingled feelings of love and gratitude that I ascended the pulpit, and stood reverently where they had stood, and sat in the seat where they had sat.

On the other side of the street from this lies the Potter's field. In 1666, when the plague swept over London, men went through the streets by night crying "Bring out your dead!" and these they loaded upon carts and drove to the Potter's field, where they were cast with irreverent haste into deep pits, and, with only a slight covering of earth, were left without benediction or farewell to Him who commandeth the "pestilence that walketh in darkness and wasteth at noonday." To this loathsome spot they brought Bunyan, the pious prisoner of Bedford jail, who during the seventeenth century had no peer in creative genius but John Milton, and left him with no memorial to mark his resting-place. But a later and more appreciative generation has placed above his dust a monument worthy of the author of the greatest and purest of Christian classics.

Through the politeness of Mr. Moran, our accomplished secretary of legation, I had the pleasure of listening in the House of Commons to one of the ablest debates of the session. Early in the evening there was an indifferent discussion on some bill relating to the Navy, participated in by several gentlemen, among whom were Lord Lenox and the first Lord of

the Admiralty. Happily this soon closed. After that a bill making an appropriation to pay the Geneva Award was taken up.

The result at Geneva was a terrible blow to English pride. The bitterness felt at the national humiliation was extreme and nearly universal. The tories took advantage of this to make a preconcerted and malicious attack upon the ministry in the hope of ousting Gladstone from the administration. A man in public life, of preëminent ability, is always hated and hunted by the men of conscious inferiority who stand below him. He is in their way, and will be removed from place and favor by public sentiment, if it can be created, and, if not, by means meaner and more cruel than a crime. He is guilty of superiority, and must be made to pay the penalty of humiliation for his greatness by arts which noble minds would spurn with contempt.

An impartial court had adjudged the nation guilty of a shameful violation of international law, and doomed the government to a heavy penalty. Immediately the Tories sought to sacrifice the prime minister as a victim for this public sin, and at the same time make that sin a means of grace to themselves. This cowardly attack was opened by the venerable Bentinck, in a stammering, illogical speech, and it was followed by several others in the same angry spirit. At length, Sir Stafford Northcote rose to speak. Having met him in Washington, where he acted as one of the high commissioners to negotiate and sign the treaty which provided for the Geneva Tribunal of Arbitration, I was curious to learn how he would play his difficult rôle. I knew he was able

and eloquent, but to twist his own work into a charge against the government, without convicting himself, seemed to require a sleight of hand impossible even to one as dextrous as he. He began by saying that in this day of steamships and telegraphs we could not hold a commission or an ambassador responsible for treaties negotiated by them with governments to which they were accredited, inasmuch as every question of importance would be settled immediately by letter or telegram between the contracting parties. Having erected this barricade, he plunged into a series of very ingenious and rasping strictures upon the administration.

The conduct of Gladstone during this debate was a study of unusual interest. He sat with his hat on, as members of parliament generally do except when speaking, and as members of congress did in the early history of our republic. The room in which the commons convene is a long hall, with seats on each side of a middle aisle, at the farther end of which sits the speaker, wearing a black robe and a voluminous wig, and suggesting a veritable survival of the Dark Ages. Half way down this alley there is a small table, at one end of which sat Gladstone, stooping forward, with his hat drawn over his eyes, apparently the least interested person in the house, listening to this weary waste of bitterness through which he was being dragged. A few times during the evening the grand old statesman, weary with the weight of years and of empire, started up, and turning nervously to Bright or Lord Cockburn, who sat near him, whispered a few words, and then dropped back into his seeming sleep.

But when, at last, the opposition had exhausted

itself, he rose slowly from his seat, removed his hat, laid his hands upon the table, and in a low, quiet way began to address the chair. For a time it seemed to be a conversation with the speaker, rather than a speech to the house. But, little by little, the fire kindled to an intense heat; his form rose and dilated to its full measure; his deep set eyes flashed with passion; his voice, full and clear, thundered over the house, and the lightnings of his indignation, one by one, blasted his assailants. The leagued opposition, that had just assailed him with such assurance of victory, seemed to fade before him into invisible air, as the mists of night melt before the heat of the morning sun. It was mediocrity and malice strangled in the grip of intellectual power. The master of his subject, in its history and its law; with all learning at his command; with a faultless diction and a dramatic power of expression,—Gladstone seemed to me that evening, as he held all in the spell of his matchless eloquence, not only to control the destinies of the empire by a right divine, but to be, by the Platonic tests, the greatest of living statesmen.

At a later day I visited the splendid library and chapel of the Parliament Houses, and listened to an instructive discussion in the House of Lords on the nomination of colonial bishops, in which the Bishops of York, Canterbury, and Winchester took part on one side, and the Duke of Richmond, Lords Stanley and Cairns, and Sir Roundel Palmer on the other. I cannot dwell upon the details of this debate, except to say that it was conducted with great courtesy on both sides, and that while the bishops were the better orators, the lawyers were the more learned, and, as

the question turned upon a constitutional prerogative of the crown, they defeated the clergy.

One of the pleasantest trips made during my stay in the city was a visit to the old historic town of Windsor. Its castle, in whose crypt reposes the dust of successive dynasties of kings, a place of violence and blood in an earlier age, is to-day the favorite home of Victoria. Passing through its suites of splendid apartments, and its halls hung with the celebrated paintings of the old masters, out upon the battlements, we are greeted with a landscape which for natural beauty and hallowed associations has few parallels anywhere. The crown lands, laid out in parks and fields of the richest green, extend far back from the Thames, upon whose high bluff the castle was originally built by William the Conqueror for a hunting-post. In one direction you look away to Runnymede, where the barons wrested from King John the *Magna Charta*, the foundation of liberty to all English-speaking peoples. Three miles south, upon a hill at the end of a walk shaded by ancient elms, stands a colossal statue of George the Third. To the right you see Harrow-on-the-Hill, where Byron and other famous men were educated; before you is the stately mansion of the family of William Penn; and nearer is Stoke Pogis, where

“Beneath those rugged elms, that yew-tree’s shade,
Where heaves the turf in many a mouldering heap,
Each in his narrow cell forever laid,
The rude forefathers of the hamlet sleep.”

There, too, sleeps Grey, the author of the Elegy, by the side of his sainted mother; and just under the walls of the castle on the other side of the river is

Eton college. Here, on narrow oaken forms, sit the sons of the merchant princes and nobles of the realm in preparation for the University. These boys, I found, had carved their names in great numbers into the oaken wainscoting of their recitation-room. Among these I found the name of Wm. E. Gladstone, who has been carving his name into the historic wainscoting of the world ever since. I was again in Windsor after my return from the North.

Having learned that the shah of Persia was to have a public reception there by the queen, I went down to witness the ceremony. It was a royal affair in more senses than one, but had withal a touch of the ludicrous to an American eye. There was an immense concourse of spectators present, and fifteen thousand of the best soldiers of England were in line to be reviewed by the queen and shah and their respective suites. The shah, as I recall it, rode a cream-colored horse richly caparisoned, and having a scarlet ribbon tied around his tail about six inches below where the tail becomes horse. Below that the tail itself was dyed a deep scarlet. This, I presume, would be styled Eastern magnificence. During the movement one of the suite fell from his horse, and the horse ran full speed at the military. The soldiers stood imperturbable till he approached their line, and then obliqued to the right and left, apparently without the least excitement, and let him pass through. They closed up at once, without turning back to look after the horse. That is English drill. That enabled Wellington's forces to withstand the successive charges of Ney at Waterloo.

The English did not like the shah, and called him

a "nasty fellow," but to me he seemed like a sharp, shrewd little man, of fair abilities. I saw him two or three times after that in different parts of Europe.

The queen has a strong, plain German face, and bears herself with great dignity and propriety. She is a good queen, and a better woman, and has, as she deserves, the love and respect of her subjects.

But it is now the third of September, and we must leave London with our story half told, and start on our trip to Scotland.

Through the stupidity of the conductor we missed the train at Newcastle, and were compelled to reach Melrose by a *détour* through Berwick. It was a fortunate blunder, for it brought me into that old feudal stronghold, which, during the long border struggles between the English and Scotch, was the bloody gage of battle, passing to the one or the other with the issue, and obtaining at last an independent jurisdiction as "Berwick on the Tweed." The clash of arms has been hushed for generations, and the grass is growing in the quiet street, but fragments of the old walls, some of the gates, the battered remnant of an ancient tower, and the wrecks of the old castle still remain as memorials of an age of violence.

On the arrival of the train we left for Melrose, which we reached late in the afternoon; but, remembering the poet's direction to view Melrose "by the pale moonlight," we waited till the haunted night-light had crept through the broken arches and thrown its ghostly shadows into the dim cloisters and over the grass-grown pavements of "St. David's lonely pile." As we stood inside, and saw the soft, ethereal light resting peacefully above the bloody Douglases

and the stormy heart of Bruce, imagination contrasted the scene with the restless turmoil and violence through which these Scotch chieftains had reached this last long rest by the altar of the Prince of Peace. There their ashes were inviolate.

This old abbey is the most beautiful of Gothic ruins. The delicate and exquisite workmanship of its celebrated eastern window has few parallels anywhere. It is a curtain of lacework woven in stone. The rest of the structure was only inferior to this, and all was worthy of the immortality which the poet has given it.

Four miles east of Melrose are the ruins of Dryburgh abbey, founded more than seven centuries since, and a yew-tree as old as the monastery stands in front of the entrance. There, in St. Mary's aisle, is the burial-place of Walter Scott and his family; and when seven more centuries shall have passed, the memory of Scott will rescue the site of Dryburgh itself from oblivion. His name will live when the monument has crumbled, and will perpetuate its memory.

Three miles west stands the palatial residence of the great author, within a majestic sweep of the Tweed, near the old ford of the abbots of Melrose monastery, who gave a name to the place. Abbotsford is an architectural romance. In every apartment you will find relics or reminders of the great families and the tragic history of Scotland. In the library, the study, and the bed-chamber the great poet seems to reveal himself in palpable form to the sympathetic soul, and you go away feeling that it has been good for you to have been there.

From here we pass on to the classic city of Edin-

burgh. To devote a paragraph and not a volume to the rich and abundant material which this northern city furnishes to the traveller seems absurd ; but the want of time forbids my doing more.

The historic student finds himself hastening, first of all, to the old castle of the Pictish kings, crowning the precipitous terminus of the central of the three parallel ridges on which the city is built. A faithful record of this ancient stronghold would be a thrilling epitome of the dramatic history of Scotland. Passing down the summit of the ridge through High street and Canongate, we visit the old Scotch Parliament House and St. Giles church, so famous in the religious struggles of Scotland, and in which Montrose and the Regent Murray found rest at last from their enemies. We linger at the house of Knox, from whose window the fearless reformer preached to the people. We are arrested by a heart in the pavement at the site of the old Tolbooth, "The Heart of Mid-Lothian;" we enter the adjacent church-yard, and stand by the graves of Adam Smith, Dugald Stewart, and the poet Ferguson, and recall the sweet tribute of Burns to the memory of the neglected bard ; and we come at last to Holyrood, and visit its deserted halls, and, standing by the blood-stain in the floor, listen to the tale of Rizzio's murder by the hand of Darnley in the presence of the beautiful but imprudent queen.

From here we climb to the wide view of Arthur's Seat and Salisbury crags, the favorite resort of Scott, resting as we go up in the humble cottage of Jeannie Dean.

Returning to the city, we stop instinctively at the University, made famous by the labors of such men

as Maclaurin, Black, Ferguson, Robinson, and Brewster ; we gaze with reverent admiration at the magnificent monument to Scott, colossal like himself ; we study the memorials of Carlton Hill,—and hasten away to the sequestered valley of the Esk.

At Hawthornden we stop at the classic house of the poet Drummond, to whom rollicking Ben Jonson made an unwelcome visit on foot from London. We examine the caves in which the hunted patriots of Scotland hid from their pursuers. Following the stream down this lovely valley, we soon come to the ruins of Roslyn castle, located on a nearly isolated rock, near where the poet tells us the "brave Lochinvar swam the Esk, with his bride on his back." I have no disposition to question the veracity of the poet, but at the time I was there I stepped over the Esk dry-shod on the stones in its bed. I do not deny the right of a poet to thus deepen a stream if his purposes require it : I wish simply to emphasize the difference between poetry and fact. Near by stands Roslyn chapel, the richest gem of Gothic architecture, I doubt not, in Scotland. Lord St. Clair is said to have erected the chapel in the discharge of a foolish vow. The designer came from Rome, and the master-builder, being unable to complete the plan, went to Rome for instruction. In his absence an apprentice carried forward the work, and among other successes erected a fluted pillar crowned with a capital of interwoven foliage and flowers, so delicately carved and of such surpassing beauty that the master, on his return, overcome with anger and chagrin, lifted his hammer and struck him dead. From that time the apprentice's pillar has been deemed a monument to the

genius of the youthful artist who immortalized the shaft that perpetuates his memory.

On returning from this trip we started northward once more for the Highlands. We approached Stirling with an interest that was almost painful. There our feet were on consecrated ground. Its fields had witnessed the marvellous exploits of Wallace and the final triumph of Bruce. The voice of revelry and the cry of murder had been heard in its ancient castle. Here kings had been crowned and dethroned, and political events of great pith and moment had transpired; and all had been woven into song and romance so deftly by the wizard hand of Scott, that we felt perplexed which first to see or which way to turn. But a want of time forbids our dwelling upon the scenes or the history of this ancient town.

A little below the place is Bannockburn. Here Robert Bruce, having placed his camp followers behind Gilles Hill, marshalled his forces in the plain and fought a furious battle with Edward II. For a long time the conflict hung in even scale, but at length the camp followers, forming in line, marched into view, and the English, thinking that the Scotch were to be reinforced by a fresh army, turned and fled. Thus an accident placed the crown of Scotland upon the head of her greatest king.

From Stirling we made the tour of the Trosachs and the lakes by way of Callander. The natural scenery of the Trosachs, though to the poet it was

“Crags, knolls, and mounds confusedly hurl'd,
The fragments of an earlier world,”

is exceedingly tame to one familiar with the grandeur with which we are here surrounded. It is the ideal

life given to this region by the genius of literature, which, mingling with the tragic realities of Scotch history, imparts to it a strange fascination.

Now we are at Coilantogle's ford, to which Rod-erick Dhu led Fitz James to upbraid him with "wear-ing a braid of his fair lady's hair," and where strength and skill met in mortal combat. Now we pass the birthplace of Helen MacGregor, and now a dilapi-dated fort, which Wolfe left to give an empire to Eng-land on the Heights of Abraham.

Embarking upon a small steamer, we glide over the silvery waters of Loch Katrine amid enchanted scen-ery, and passed Ellen's Isle, where King James first met the "Lady of the Lake," and

"Where for retreat in dangerous hour,
Some chief has framed a rustic bower."

Leaving Katrine, we came to Inversnaid and embarked upon the broader waters of Loch Lomond. This part of our journey was through the grandest and richest scenery of the Highlands.

Soon after our return, we started again for the north. Just outside of Sterling we passed an ancient abbey, and another of the numerous monuments which a grateful people have erected to the heroic achieve-ments of William Wallace. On this trip there were two or three intelligent Scotch gentlemen in the com-partment with me, but, being a stranger, I did not presume to join in their conversation, though deeply interested in it. But when the train stopped at a sta-tion, I turned to the gentleman in front of me, and asked him if he would be so kind as to tell me if that was Inverness. "No," he replied, "this is Nairn; the next stop will be at Inverness." This led to conversa-

tion. On leaving the cars I bade him good afternoon, and went to my hotel. After tea I strolled down the main street; and near the outskirts of the town, as I stood looking at a depression in the ground which I was told marked the site of Macbeth's castle, I heard some one behind me say to his driver, "Hold up." Looking around I saw Mr. Mackintosh, with whom I had spoken in the cars. He asked me to ride home and dine with him. I told him I had already dined, but he pressed me with such cordiality that I accepted his invitation. We rode out for some distance over a splendid road, till we came to a gateway, where a little Scotch girl came out from the lodge and threw open the gates. We drove through, and, passing for some distance under over-arching trees, came to his mansion. We left the carriage, and entering the house I was introduced to his wife and children; and after a most agreeable entertainment, which to me was mostly intellectual, as my physical wants had been satisfied, a coach was brought to the door, and we all rode to the field of Culloden Moor. Mr. Mackintosh pointed out to me the humble house in which Prince Charles lodged the night before the battle, the large boulder on which the Duke of Cumberland stood and commanded his forces, and the grass-grown mounds in the centre of the field where Lochiel led his Highlanders into the deadliest of the fight.

On returning home we met an intelligent gentleman from the town, and, after listening to a recitation of "Lochiel and the Wizard," by the young son of Mr. Mackintosh, rendered with admirable expression and a pleasing touch of the Scotch brogue, our conversation drifted on to Scotch and American life; and we took

so little note of time that I did not reach my hotel till past midnight. I was invited again during my brief stay at Inverness to meet an agreeable company of gentlemen at dinner at this house. I shall never cease to be grateful for the generous hospitality of this distinguished Scotch family.

A few miles from the town stands Cawdor castle, the hiding-place of Charles Edward after the defeat at Culloden. As Macbeth was thane of Cawdor, it has been assumed that here is where good King Duncan was murdered; but as Duncan was murdered some four hundred years before the castle was built, this could hardly be. Shakespeare has badly mixed fiction and fact in his marvellous creations, so that several places have claimed the honor of Duncan's taking off; but if he was murdered in any castle, it is likely to have been the one at Inverness destroyed by Malcolm Canmore. I also visited the Druidical remains, which are found some two miles from Culloden Moor. Flat stones, resembling our old-time slate gravestones, are still standing in concentric circles; and there is a caldron-shaped pit made of rubble, and that is all now left. On the other side of the town there is a "vitrified fort" on a hill, whose origin is not certain even to tradition; and a cemetery on Tom-na-hurich, or the "hill of the fairies," which, on visiting the capital of the Highlands, we should not fail to see.

The trip down the Caledonian canal and the Clyde, though lined with objects of interest, we must pass in silence. Neither will we linger in the classic city of Glasgow, or stay at the stronghold of the Douglasses of the bloody heart at Bothwell.

But to Ayr we are drawn by cords of affection

which we cannot resist. Crossing into the town by one of "The Twa Brigs," the older of which was built by the maiden sisters carved upon its parapet, and passing the site of the dungeon tower in which Wallace was confined, we soon come to the clay biggin of two rooms, in a recess of one of which Burns was born. A little farther on we come to "Alloway's auld haunted Kirk," in which Tam O'Shanter saw the dance of the witches, while the devil sat in the window and fiddled. In front of the church is the grave of the father, whom the tender epitaph of his son has made immortal. On the opposite side of the road is the temple monument, built by loving hands to the memory of one whose name can never perish from the languages of men. Not far from this is the old bridge that spans the "Bonnie Doon." I went over and under the bridge, and wondered to how many millions its poetic name was a household word. When I was there the lads and lasses were dancing on the green to the music of the bagpipe and fiddle, and I felt the inspiration of Burns.

Later in my journey I visited the home of the king-maker at Warwick, and sauntered through the halls of the old castle, and mused upon its tapestries and upon the portraits of the great dead of this ancient and powerful family. From here I went to the famous ruins of Kenilworth, and sat in its desolate banqueting hall and thought of the vanity of earthly power, as I reflected that Elizabeth, and the powerful favorite with whom she here feasted, could claim no favor in the court to which they had both gone, above the humblest subject of the realm. Caesar's tower, that once guarded the revelry of mustering crowds of the nobil-

ity, now casts its shadow over a scene of loneliness and desolation. The tide of life has gone out since then. The young, who draw their conceptions of Kenilworth from the pages of Scott, would be sadly disappointed with its present reality. The creations of genius outlast our short-lived civilizations and the perishable structures of our hands.

The founding of Oxford, which I next visited, we fondly trace to Alfred the Great. The university sprang certainly out of the dim shadows of antiquity, but has poured its living waters with an ever-widening sweep through all the subsequent centuries. Of the nineteen colleges, five halls, numerous libraries, chapels, and churches, I had time only for a general inspection.

A gentleman from Oxford, whose acquaintance I made on the train, wrote down the following brief directions for guidance: "Go to the Bodleian library; see at the same time the Radcliffe, the schools; then down High Street avenue to Magdalene; then across by Merton to Christ church." Following this short schedule, I saw the best of the institutions without waste of time, and was deeply impressed, not only with their magnificence and their wealth of endowment, but with the splendid opportunities which they afford to our fraternity in the republic of letters. The statesmanship and intellectual resources of the public men of England, and the broad scholarship of her great writers, are largely due to these rich and venerable institutions. Nothing can be found, I apprehend, more instructive to one engaged upon a philosophical investigation of educational systems than a careful study of the origin and development of Oxford or Cambridge.

He will learn that the organization and government of the university were the slow growth of centuries, from the simple regulations of feeble, voluntary associations.

Before leaving Oxford, that I might not be accused of disloyalty to the genius of authorship, I took a long stroll in "Addison's walk," and immediately after renewed my pilgrimage to the Mecca of all authorship.

On reaching Stratford, I went, first of all, to the place of Shakespeare's birth. I was shown into a small room in one of the poorest houses of the village, and found its walls nearly covered with the names of admiring visitors. I examined all the reputed relics. I went to New Place, where he lived as a rich man after his return from London, and exercised all a New Englander's inquisitiveness to learn something new. I looked into every nook and cranny of the cottage in which Shakespeare made love to Anne Hathaway. I hunted traditions, and found none. I went to Stratford church and stood by his grave; but there was no voice from it, nor from the stupid bust upon the walls above it. No more is known of Shakespeare at "Stratford-on-Avon" than in this secluded retreat among the mountains of New Hampshire.

The master intellect, the inspired soul that spoke for mankind in all its experiences of life, is to-day an undeciphered mystery in his own home. Perhaps it is best that we cannot localize and measure with the ordinary limitations of humanity the genius that was born for all ages and peoples. But it seems strange that recognition of his greatness should have been posthumous. In Frankfort I asked if Goethe read

Shakespeare. "He read Shakespeare—then he wrote," was the reply. He who threw the splendors of his intellect into the German tongue and made it a classic, drew his inspiration from the exhaustless wells of thought and passion which the "bard of Avon" opened in English literature.

Twenty years since I resisted when James T. Fields claimed for Bacon the honors of Shakespeare, and I will not yield my devotion now; but I am perplexed and puzzled with the greatness and universality of his works when I recall his early limitations. I can realize that a gifted poet, without a thorough discipline of the schools, may sing the loves and hates of his people, and win a high and permanent place in the literature of the age, but how he can create the life and speak the language of courts and other circles in which he never moved; how he can know without study the subtleties of law, medicine, and diplomacy; how he can translate from a tongue he has never learned,—I find it difficult to conceive.

If the divinity that stirred in the unschooled boy of Stratford lifted him to the height of this great work, his inspiration was as extraordinary as that of Paul. But the possibilities of Providence are infinite, and we will yet believe that the right of Shakespeare to the loftiest place in the sphere of creative literature will be established beyond a doubt.

Here our wanderings in the home of our fathers must close. Our journey has been long and hurried, but not unprofitable. We return to our country with a deepened pride in its history, and a more abiding faith in its institutions.

V.

READING.

BY WILLIAM H. LAMBERT, PH. D., PRINCIPAL OF THE B. M. C.
DURFEE HIGH SCHOOL, FALL RIVER, MASS.

There are, it seems to me, two lines which the reading of the teacher should follow,—first, that which bears directly and practically upon his work; and second, that which is not pedagogic at all, but rather aims to furnish stimulus and culture.

There has been much said and written in recent years to prove that teaching is a science, and therefore is to be included among the learned professions. It would certainly be a great gain if people could be assured that teaching has a scientific basis, so that our conduct in particular cases might be justified beyond controversy to the most captious criticism, and that there might be a uniformity of practice among teachers, or at least such an approximate unanimity as obtains in other professions. But if teaching is not a science, as Prof. Joseph Payne would have us believe it is, that upon which teaching is exercised possesses a science. The human mind, which is the main subject of teaching, acts in accordance with laws well ascertained, universal, and uniform. The teacher's first reading, then, should be of books in which students of the mind have explained

and illustrated these laws. This seems like uttering a truism. To say that psychology should be studied by the teacher, is like saying that anatomy should be studied by the physician—an assertion which should be entirely superfluous in a gathering of teachers. But the number of men and women certified as competent to teach, who, I will not say, are not in the habit of reading books treating of mental science, but who have never in their lives read a single book of such a character, is still unfortunately large. There are many teachers, who, by their energy, application, native tact, and ability, have achieved success in their work, who still believe that teaching is based on experience alone; that there are no laws underlying the action of the mind, a knowledge of which is essential to proper methods of instruction.

Two weeks ago there was celebrated, at Framingham, the semi-centennial birthday of the oldest normal school in America. The historical address given on the occasion contained passages which, to me, were full of pathos; but nothing in the address was more pathetic than the story of the bitter opposition to the school in those early days by the teachers of Massachusetts, who insisted upon the folly of attempting to teach such delusive stuff as "Principles of Education."

Wherever teachers have been successful, it is safe to affirm that they have been so because they made their practice conform to mental laws. To ignore the principles which psychology teaches, is to render our work crude, bungling, and mechanical.

Next in importance to books on the science of the mind, are books relating to the history of education.

No man is sufficient unto himself. Individual experience is narrow in its range, one-sided, and imperfect; therefore it must be supplemented by the experience of others. It is the characteristic of all progress, that it is built upon the acquisitions of the past. To know where others have erred, assists us in avoiding their mistakes. To understand where they have triumphed, guides us along the line of success. It seems to me that no teacher, who desires success in his profession, can afford to be unacquainted with what has been done by his predecessors. Unfortunately, books upon the history of education have, until recent years, been confined chiefly to the German language, but, thanks to Mr. Barnard, Mr. Quick, and others, they are now made easily accessible to English readers.

Next in importance to books on the history, I would place books pertaining to the theory, of education—such books as Herbert Spencer's *Essay*, Edward Thring's "*Theory and Practice*," and D'Arcy Thompson's "*Day Dreams of a School-Master*." Such books are wonderfully suggestive and stimulative, and open the mind to broad outlooks. One cannot read them without receiving the feeling of added dignity and power.

Of books pertaining to methods or the practice of teaching, purely as such, very little can be said in praise. I think they are rather to be avoided as tending to deaden thought and to encourage mechanical work. They often remind me of quack medicines, sure remedies for all of the school-room ills, but endangering rather than curing the patient. When I think of the vast amount of this reading which is laid before

the teacher through the agency of educational journals, magazines, and books, and of the insistence of each writer on the importance of his particular method, I am reminded of Goethe's lines,—

“Prophete rechts, prophete links,
Und das Welt-Kind in der Mitten,”

and the poor world-child, in the multiplicity of his guides, is confused, bewildered, and lost. The safest advice in respect to this reading is that usually given to people unacquainted with dangerous explosives, “Handle with care.”

The advance which the teaching profession has made in America may be safely measured by the amount and character of the reading upon pedagogic subjects. The amount seems to me to be enormous. I do n't think there is such a demand for purely professional books in any other profession as there has been among teachers during the last few years. One does not have to be very aged to remember Page's “Theory and Practice” as the only book of importance published in America, especially for teachers; and for genuine helpfulness, for wise suggestiveness, for inspiriting stimulus, it has never been excelled. But to-day there are at least half a dozen publishers who vie with one another in putting upon the market books on pedagogy.

Willard Small, the well known Boston book-seller, tells me that he has sold more than six thousand copies of Prof. Joseph Payne's “Lectures.” Add to this the sale of this remarkable book by other publishers, and we may form an idea of the character and amount of the reading which is done by the

teachers of America. There are men here to-night, who not many years ago were wont to give liberally of their efforts, their time, and their money too, to keep alive monthly journals for the use of the teaching profession, such as the "Massachusetts Teacher," the "Rhode Island School-Master," and the "Maine Journal of Education." They were modest enterprises. The list of subscription was so small that the editors could have easily known each subscriber by name. "Barnard's Journal" cost its editor and publisher a fortune—a journal which is a veritable gold-mine of pedagogic literature. To-day there are publications,—weekly, monthly, and quarterly,—that, for freshness of treatment, variety of subjects, and vigor of editing, compare favorably with the best publications in other professions, and have become, if one may judge from the outside, a source of profit, perhaps I may say of wealth, to their publishers.

But besides the reading which is purely professional, there is another class which is essential to the teacher's success. I mean that of general literature—poetry, the drama, the essay, the novel. This is the reading that furnishes power in distinction from knowledge, and which leads to culture, or, if you prefer, to "sweetness and light." Mr. Matthew Arnold, who by virtue of his public employment was reckoned a member of our profession, did the world a great service in rescuing this word *culture* from the opprobrium under which the Philistines would sink it, by defining it as a study of perfection, and as having its grounds in the desire to make the most of ourselves and of the powers with which God has endowed us. This culture the teacher needs above

all men. Without it he can never hope to reach the loftiest heights of his calling. And this culture is to be gained largely by a close and daily communion with what is best in literature.

If I were asked to give to the young teacher the best advice gained from twenty years and more of teaching, I should express it in the injunction, Read. Read educational journals; read books that bear directly upon your profession; read books that bring you power and culture, and power through culture;—so will you be equipped for the important duties of your vocation.

VI.

THE READING SENSE.

BY ROBERT C. METCALF, SUPERVISOR OF PUBLIC SCHOOLS,
BOSTON.

I must ask your attention to a kind of training that should result in what may be called *the reading sense*.

Have you ever thought that much of the pleasure and profit of living comes directly or indirectly from our reading? As we listened last evening to the able and interesting paper on "Historical Study," did it not occur to you that the kind of historical study of which the lecturer spoke, and the kind of teaching which he advocated, require a vast deal of reading in order to make the study and teaching such as they should be? This evening the speaker has told us, in his inimitable way, of his travels and experiences in England, and as he spoke I watched your upturned faces, and knew that you were seeing with his eyes and hearing with his ears what he saw and heard in the good old mother-land. But would your pleasure have been as great, and would the hour have brought you equal profit, had he neglected that careful preparation for his journey which comes only from an extensive reading of books? Suppose a man ignorant of books, and lacking in that cultivation of mind which comes only

with much reading, to be placed right here in this lovely town of Bethlehem, surrounded with mountains and hills of such varied form and beauty: what think you of the pleasure that would come to him (for doubtless there would be pleasure) as he looked for the first time upon the mountains and valleys, the forests and the open fields? How would it compare with that which would fill the soul and thrill every nerve of one who had been trained by careful study to see, to feel, and to appreciate?

How many of life's difficulties have been overcome, how many rough places have been made smooth, how many of us have seen more clearly where the next step is to be taken, because we have been made to feel, while reading "Robert Falconer," as we never felt before, that the duty which lies nearest us is the one that God requires! How the blood will tingle to our finger-tips, when, with the eyes of a well trained imagination, we see sturdy Tom Brown hurl his boot at the head of the cowardly bully who dared to sneer at little Arthur, kneeling by his bedside as he had knelt at his mother's knee in the home now far away! How the wonderful pen of Mitchell, as if by magic, will bear us away from earth, with all the troubles that vex and all the pleasures that give us joy, and lead us reverently through the courses of the stars which wander in the depths of infinite space! And when trials come, as come they will to every one who reaches middle age, when the thick clouds of sorrow slowly but surely gather about us, shutting out the bright sun and the stars and all the heavenly bodies that bring us joy, and everything seems dark and dreary as we grope among our daily duties, how the

genius of a Robertson will lift us above the clouds, into the very presence of the Almighty, where we feel our hands held firmly in the warm grasp of a loving Father!

Now if we, as parents or teachers, gather from the books we read so much pleasure as well as strength,—if life to us is made so much richer when we are brought into touch with the master minds of the present and the past,—ought we not to train our children so that they too may profit as we have profited, and may enjoy as we have enjoyed? Have we a right to send them out into the world so devoid of the reading sense that all the wealth of our literature to them lies locked in mysterious vaults?

You who have sons or brothers just verging upon manhood know full well with what confidence you trust them in the trials and temptations of daily living, when their love for reading is so strong and their taste for good books is so decided that help to endure and strength to resist will surely be drawn from the inspired pages of our best literature.

But how can we give such training to our children? What time have we at our command, or what part of the work now required may be set aside, that we may do this other work which is so necessary to the well-being of our boys and girls?

I have seen a mother patiently and lovingly reading to her boys for hours, during weeks and months and years, as they sat lazily by and listened. I have seen volume after volume eagerly devoured, books that perhaps the boys never would have chosen for themselves, but which are now most thoroughly enjoyed because mother is reading with them. And,

gradually, I have seen the tastes of those boys changed until it seemed that old things had passed away ; all things had become new.

Our boys and girls are usually willing to accept the choice of books made by father or mother, if father or mother will only read with them the books thus chosen. And so it is, or will be, in our schools. Let the teacher read with the children some carefully chosen book, some story well adapted to their age and needs ; let the pupils talk familiarly of what they read—tell why this character they love while that they hate, picture the scenes described, and question whether they are true to nature,—read thus, I say, with the pupils for a few minutes every day, as a reward for other work well done, and there will be no perceptible loss of time; but rather a gain in power to do the other tasks assigned.

I have only hinted what *may* be done. The teacher whose life is consecrated to his work will find time and means to establish in the hearts of his pupils a love for much that is purest and best in our literature for the young. His most difficult task will be the beginning of the work ; but let it be begun with an earnest purpose and a steadfast determination to do something that may be of service to his pupils when they take their places in the busy walks of life.

VII.

THE SCHOOL AS IT IS, AND THE NECESSITY FOR MANUAL AND INDUSTRIAL TRAINING.

BY HENRY C. HARDON, MASTER OF THE SHURTLEFF SCHOOL,
BOSTON.

In speaking of school and the relation of manual and industrial training, permit me to utter before you a few old platitudes; possibly to arrange a part in some new order, as the foundation of some propositions that I would set before you. If you should wholly or even partially dissent, you will, I trust, exercise that privilege so dear to the ambitious American citizen, that of following to show that the speaker is off the track of truth; for no man is to be spared in the vigor with which he shall be opposed when any shall discover that his conclusions are erroneous.

It is not to be expected that we shall at any time feel absolute confidence in all our plans of training. All the experiments in conducting the affairs of life seem but tentative to an ideal standard—often only feebly so. The part that we dignify by the name of the educational is no exception. The fences that are set up to mark this off may serve a purpose, but we need to know that they are not real boundary lines, and may be disregarded, moved, or removed altogether.

As life about us changes, as new fields are occupied, as old methods give place to new, as great cities multiply in which the bottom stratum of humanity does not give a cheering look, as immigration increases, some of it with no sense of responsibility nor the knowledge of how the state is formed and supported, either financially or by the character of its people, and having as its motto in relation thereto that it is "agin the government," does it not well become us to look over the field often, to see what readjustments should be made; to declare boldly that our educational appliances need change, enlargement; that our conception of educated men, even, needs quite a revision, casting some out and taking some in,—for how can the powers of man be said to have been led forth, if he is incompetent to deal in some honorable and effective fashion with the very world into which he is born, in which he is to earn his name if he has any, whose people he is expected to benefit, and for which in some way he ought to give one strong and continuous push towards the age of bettered being?

Questions of this import are not only often asked in the daily press and written of in books, but are also the conversation of thoughtful men by the wayside, of clubs of live women whose thought has more in it than fashion and pleasure. Some of these are looking for light in earnest, and believe that a broader, better way is to be found, that enlargement is to come to the educational idea, and then, of course, to the educational practice. When men, not counted in the ranks of those who are supposed to be able to improve methods of training to self-helpfulness and the strength that the state needs, are thus awake to new possibilities,

then it is well that we all look over the whole field, take light from any quarter, and be very thankful to get it.

Not that our own ranks need be ashamed for lack of the spirit of progress. They have seen, counted, labelled, and published many a defect. While achieving a success in some ways that the dreams of youth never entertained, it is but to discover new possibilities ; to set the goal forward, and to be impatient of the inability to realize the new dream. With the added wealth of the nation there is the increased power to furnish all the really needed appliances of education ; and yet there is a disposition on the part of some few, who inherit that wealth, to neglect the means by which their fathers grew in riches, character, and power ; to suppose that life is mainly to show their importance ; and while they wipe their delicate mouths with a napkin a yard square, and of finest linen, and talk of manners, and work hard at cutting their coupons, and thank God that they are not as other men, they yet further emphasize their elevation by often dwelling on the great distance between themselves and those on the bottom round, meaning those wild, unwashed, and ungoverned, the cause of whose condition they, joining company with the truly morally elevated and truly refined, would do well often to consider with care ; to set to work any of the moral and regenerative appliances to reduce their number ; yes, and not to be too much grieved at the arrangements of Providence, by which, even with the forces of society as now applied, imperfect as they are, some of the children of these lower roundsmen shall rise to respectability and to the service of the

state, while some of the children of the former shall go down to a lower level.

The problem that we wish to tug at is, how still better to take in all; how these former can send down the father's name so as to gladden the old heart and add to the public weal; how to force by fuller training the lower ranks into respectability and added happiness, with a like chance to all who stand between,—this latter great body being the one most likely to utilize opportunity, for whom the chances of making the most of life always seem to yield the largest fruit. As the case stands, even at present, the public school, great in the past, greater still in the present, is plainly a tremendous force for future power and good in the nation. The class that would without it be so exclusive, is kept small. The conceit is taken out of thousands of youth often with much pain, but with great and lasting profit. This lesson in humility is also followed by good things. High respect for others, begotten of discovered excellence in them, is succeeded often by friendship. The sympathies are widened, the life is elevated: the benevolence that comes to the front when the true education gets under way, gives the world to such a new aspect. It is one of the many possibilities of being born again.

The good thus done to those who suppose themselves at the top goes far along the line with an increase of good toward the hundredth whom we call at the bottom. His case is a bad one. With him the forces of society to elevate glance off. Evil hits him broadside and impresses him. Vicious tendencies commenced in him nine months before he saw daylight. They were fostered from that time in the

parental condition. He is badly born. His kindergarten is one of violence, deception, and dirt. His early words would not look well in print. These are the fellows usually with a thoroughly vicious mother, or left to an aunt, lazy, tricky, or given to drink.

In the missionary work necessary to a great teacher, you have been in that woman's house many a time and begun the appeal to reason. The place was a lesson in the desirability of industry, and an appeal—a strong appeal—for instruction in the elements of household education. There is found the real reason for the lack of punctuality, the cause for absence with no excuse, the truancy and tendency to vicious ways in the child of her charge. Your appeal is strong: the promises are good: they may hold for a few days, often less. If repeated effort has tired you out to no purpose, the truant officer may cause the boy to be sent away, soon to be pardoned out to repeat his round.

Above this case, but still near the foot of the line, are some that need the most constant care. Their fathers may be daily away from home, the mothers greatly burdened and weak in control.

The strong element in the school will be glad to assist by constant inquiry, thus starting their life of benevolence at the right time if school authorities will help the barriers out of the way.

To cut off this benevolent action on the score that measles can be prevented is injustice to many of the parents who wish their children inquired for, to the child whose good is asked for, to the development of the power of assistance in the helpers, and does not accomplish the proposed object. The most plentiful exhibit of measles that our city has known for years

has been the result of recent restriction to benevolent action. The enforced absence of the other children of the family has been provocative of truancy, and has diminished the power of the schools by needless absence. Bad habits easily begun have been strengthened. A portion of the absentees have been in other houses catching measles, or spreading them in their period of convalescence among other enforced absentees.

Energetic teachers have seen a waste of power, and have felt the effect in some degree in lowering the moral tone; that is, the school has been harder for them and of less total result. Nevertheless, the school of elevated type can be and is a constant stimulus to altruistic action. The rich and the poor there meet together; the unfortunate are often known; the morally weak can be and are not only looked after, but toned up by the example and interest of the stronger. This is a good to both parties, but if opportunities for the completest play of benevolence are abridged, the result is loss of moral force, and to that extent a waste of public wealth.

In this contribution to the future public weal, it is neither the top round men in wealth, the knowledge of which to the children in this country seems usually for harm, nor the children at the foot, to whom we confidently look for strength in the ways that make for progress. The home that represents industry, conscience, the appreciated necessity of exertion, that has some vision of the future, that respects law, that is inquiring for its duty instead of beating the air with the noise of its right,—this is the spot of safety for childbirth, the proper sprouting-

place to cause new families to add to the national safety and strength. A portion of this great mass commonly called central is the leaven that is wanted for the whole lump ; often uneducated in the home, as we use the term, and yet in those homes with a kind of knowledge of ways of service and self-help and of moral force that might shame many a college graduate. It is the progressive training of these, with their quick apprehensions of duty and the power of their lead under a vigorous teacher, that makes the high grade public schools the most effective means of moral training in the land, except that family that has both father and mother of exceptional type. But this kind of training requires the very frequent doing on the part of those who would have this benefit, and impediments of all kinds should stand aside.

In this company of one hundred alluded to, for the investigation, the possible extremes of snobbery at one end, usually coming from a pretentious and undisciplined mother, and of poverty, idleness, drink, and dirt in the home at the other, the result of predisposition to evil intensified by clannishness and adherence to semi-barbaric ways, are restricted, nevertheless, to a comparative few of the total number. With increase of opportunity soon to be alluded to, though it is too much to expect any considerable reformation in the ignorant and vicious portion of imported humanity arriving when far beyond school age, we distinctly see, and have already the proof in experience, a future of an intellectual and moral and self-helpful life for many of the descendants, far superior to that of the ancestry, and in regard to the vast intermediate grade contained in our five score who are

greatly disposed to wrest success from the experience that life presents, though some will fall away from causes known, or hidden, the majority of this total line have their ambition set for large success, and are fairly willing to give the price therefor.

What is this increase of opportunity alluded to? Are not writing, drawing maps, and plans, not only manual discipline, but means of mental power fastening information which has been more clearly presented thereby? Granted. Is not this kindergarten at the bottom, with its greater freedom of child life, its better adaptation of play to the unfolding faculties, its shortened times and varied exercises, its presentation of form and color in a more methodical and fuller way, an advance such as increases the probabilities of a completer development of child faculty and a possible initiation into school study with greater chance of success? Yes, we think so, and are willing our children should be thus initiated; and now the sewing in the best organized public school, commencing with the child of eight, and with regular and easy stages of advance, is a part of the weekly training, till the young pupil becomes mistress of all the ordinary and many extraordinary stitches, till the preparation for hemming, felling, binding, darning, patching, is easy and the execution sure; these are both manual and industrial education, and from these the advance is easy with the trained pupil, and some knowledge of plan-drawing, to the cutting of plain garments, and, further, to the drawing of the form of a waist, and cutting the same with the certainty of a fit. Not many men or women who have seen the result will question the utility and the wisdom of this work. But the advance

even thus far has not been easy. Sewing has been nominally in the schools of Boston for more than thirty years, and has been opposed till within twenty years by many men who thought themselves the best of practical educators. It has been effective in a few schools for that time, and not really an affair of quite general utility and positive training till within ten or a dozen. When the appointees to this work everywhere are persons of general knowledge and organizing power, apt to teach, discoverers of new methods of imparting, much in love with the business, we shall have a great advance in the total value of the result as manual training and the industrial capability of the pupil. To appoint any others is to hold back the wheels of progress, and to trifle with the public whose agents the appointing powers are.

The point of success already reached will not otherwise be maintained, for it has been reached by the special effort of a few, and many of the teachers are but feeble followers. This, then, is one added increase of opportunity called for, and the call is loud,—industrial teachers of power, equal, if possible, in gifts to those of any department; with physical vigor and skill; with knowledge reaching beyond what is at present required, believing in the industrial education, and cognizant of its progress in the country.

The results, even thus far, in the developed ability and value of the completed product, now run outside of all general expectation a score of years ago, and the actual exhibit of many schools, not in the work of a pupil here and there, but including the whole school, are not only the required test of its general possible effectiveness, but furnish the added happy reflection

that family security, a proper division of duties, and increased power against temptation, are herein found.

It is believed, among those conversant with the domestic life of those of the lower rounds in our great cities, that, among some, not a little part of the inefficiency, sickness, loss of time, desire for drink from insufficient nutrition, is caused by a badly chosen use of money in the purchase and in bad preparation of food. Tea and common bakers' bread are not the material for bone and nerve in growing children. They do not give the best power to an adult. To reform the household, among those whose knowledge of cooking stands nearly at zero, is a reformation worth working for, and one that will add industrial effectiveness, mental capability, beauty, and longevity to the individual. Where is the woman that is not wishing that her children should be handsome? Proper feeding, not pampering, is a requisite of the first order to this result. The party that first distinctly saw that reform for some children in the schools was closely tied to an effective kitchen, and that this kind of a kitchen must be increased to thousands, and the coming mothers thoroughly and happily instructed therein, was a true seer, a great prophet: he had the good of great communities at heart, and saw something of the way.

The effectiveness of this instruction at very small cost is another happy surprise. To see twenty girls under tuition at one time, with a cost of raw material for food often less than thirty cents, and to eat at the end of the lesson, for example, oat meal with apple, toast with a little egg sauce, and rice with sauce—not a large meal for twenty, and yet not very small—and

to see that each girl has participated in the preparation and been questioned on the processes,—this is a pleasant sight. To know that they are becoming acquainted with costs, somewhat with comparative nutritions, that they repeat many lessons at home to confirm this knowledge, and preserve the memoranda for future use and distribution,—this adds to our satisfaction. The determined pioneers in this partly realized addition to a completer preparation for young womanhood, Mrs. Hemenway and Mr. Robert Swan, and the clear-headed committee on industrial education, may now look on at least twelve hundred, in Boston alone, as the annual company who have had an elementary course.

As these recipients come from homes varying from neatness and refinement to those where the ashes are swept under the stove when swept at all, with the added appearance, in general, of a hastily deserted camp in time of war, aside from the question of food, nutrition, growth, and physical health, there is the further immediate probability in some cases of new order in the family. It is partly born of shame at the parental ignorance—born of knowledge acquired in the school kitchen, of how things can be systematically and effectively done. This does add to the immediate comfort and power of the family, especially of the children, and assists to convert a staying-place to a home. This is the kind of building up that makes degradation odious, that gives a vision of a better future, and at least sees a part of the way to respectability.

Could two courses of instruction of more consequence to effective power in woman be easily de-

vised? In them, when somewhat more completely developed, lie the chief physical ministrations to the family; in them, when developed to the fullest extent, lie special arts, almost fine indeed—educative yet progressive, absorbing, honorable, and lucrative.

If an equal discipline, with a result at once convertible to human use, could be devised for the boys of the city from eight to fifteen, the problem of manual or industrial training—we shall not claim that these are necessarily synonymous terms—would be far on to a solution for the early youth of the country, giving a preparatory training, and assisting in habits of industry, order, attention, and an after willingness to work: and this after willingness to work is a matter of immense significance. That this lack of boy training is so plainly felt in our time is understood by a little reflection. Contact with the soil, and all that came therefrom or was preparatory thereto, nearly ceases with urban life. The duty so varied in form, so developing to muscular power, calling for judgment, persistence, in some cases for skill, courage, and knowledge of physics and mechanics, is mourned by many a father in its loss to his boy. Probably not a young fellow born and bred within twenty miles of the Boston state-house could swing an axe in Gladstonian style, with either hand foremost as might be required, and thus give an artistic exhibit of cutting down a sapling—a feat in elegance equal to modern base ball, and in muscular discipline equal to half the exercises of the gymnasium. These boys of two generations ago daily had their Turkish baths in summer with the money in their pocket instead of out. The fresh garden vegetables matured by their weeding and

hoeing ; the woods, the orchard, the barn, the hay-field resounded with their noise, while putting into execution their freshly acquired ideas, or halting too long between jobs to meet the paternal approbation. True, indeed, they did n't always like it. This acquisition of knowledge of any kind, and the first application of it to utilities, is more or less a painful process. When we teach children differently we deceive them.

But the sweetness lies in their results and in their contemplation,—by and by, indeed, in the very execution,—for the oft-repeated execution in time becomes easy, almost automatic, and the mind in the execution may dwell in results to self, family, or community, or busy itself with new problems. This labor in reasonable measure is not only the means of moral sanity as above, but, with the cooking that we have alluded to, the highest means of physical vigor that the modern man knows. It is as much a promoter of long life as the dwelling in great ideas, which the entertainer hopes to embody in the future good of the state.

But why dwell here? The era of prevalent rural life in this country has had its brief day. The commercial vessel in sail and steam began the change. The railroad forced that change to amazing speed. We are largely, in the northern half of the Union, a nation of cities, great and small. Shall the cry still go up, that were it not for the country the city population would die out for lack of new blood, physical power, and an invigorated will? It is a fair question. The asker says that three quarters of the leaders in city life in every department of human effort have

come to their prominence through the educative force of human industry, into which they were early bred; by which their power was as much determined as by the college. This is the report given by the men themselves. We must accept it, for the testimony is abundant. Like Marcus Aurelius, the great light in history, they are thankful that they were taught to work with their hands.

What are we going to do about such a state of things? Most of the fathers in cities see little of their own boys. They come across them on Sunday, to think they have grown,—sometimes in folly, sometimes in idleness. With few or no home duties—a misfortune to any boy—the father may be suddenly apprised that the school is less than half utilized. The boy's defence may seem plausible. The loss of half a day to investigate leads usually to the new verification that the maternal moral foundation of his family is not strong. Boys of weak mothers can't be reared to strength in the father's absence. It is very doubtful if they can be reared to strength at all. If the maternal parent is always a child in moral vision, she can see nothing but the trimmings of life. The necessity of hard-pan for character, whose substance is truthfulness, punctuality, industry, thrift, plain manners, and dress, a desire to be a helper, full of benevolence that of itself flowers in courtesy—the genuine article—this she can't see. For this blindness a curse goes to the children, who will surely stand on some of the lower rounds of life.

Call this the extreme case;—but with full family resolution and thoughtful purpose on the part of both parents the case is not at all satisfying in a majority of

the families. Can this omission be supplied, at least in part, and a fortifying industrial element enter into the plan of public grammar school training for boys? The man that could answer that question, and demonstrate a serviceable product, or a method of general and not difficult application or heavy cost, would be a great benefactor. The lessons in elementary carpentry under the supervision of Mr. Page of the Dwight school, the simple experiments now going on in many places, though highly satisfactory as a beginning, are confined to a few, and the school product cannot enter into family use.

Though the training in many a high school is now viewed with the utmost satisfaction by those best acquainted with the results, and these results have probably not been better presented than by Mr. Seaver, of Boston, the training must be called disciplinary, the results not consumable; that is, unlike the training for the girls, the lessons do not to a great extent yield a usable family product. The reason is plain;—the whole family needs clothes and their repair, and other articles of woven material, and also food, but not many milking-stools, boxes, trays, and gate-models, iron rings and barn door fastenings. Power is acquired in each case, but the immediate consumption gives the former an additional interest and strong public sympathies; and even the opposers of industrial training, as a part of public education, now usually except sewing and simple lessons in cooking.

But the way has to be made slowly. We do not intend to give a fair chance for those to laugh us to scorn whose chief talk is of aesthetics, and whose chief

labor is in paring their finger-nails to a most elegant roundness with mirror-like polish, or who are absolutely carried away by the last cravat. The former things contain fundamentals: they are a part of the base of future universal production, industry, contentment, good morals, universality of occupation, except for idiots and infants.

While we thus acknowledge that we do not yet see how this part of the desired result is to be best achieved, we are able to report a most astonishing success in another and an equally important direction. From some of the causes before mentioned,—from change of residence, sickness, lack of good schools, and loss of friends,—there are in the country a great number of young men whose school and all other training is very deficient. The chances to take hold somewhere seem to them not numerous. They apply to traders, teamsters, railroads, and still there is a surplus. The trades' unions refuse many. To teach them would create competition. Like the high tariff men, they want the country to themselves.

To afford instruction to any such needy ones, who have energy and purposes, Mr. Richard T. Auchmuty, of New York, started a night-school, where lessons in plain and fancy painting and lettering, plastering, brick-laying, stone-cutting, blacksmithing, plumbing, and tailoring were systematically taught. The materials in part of these lessons were used again and again in plain plastering, in laying plain wall, corner, fireplace, and arch; in the classified parts of plumbing, and so yet further,—all at small cost to the night-classes, and in the most systematic manner, and gave results most satisfactory. Even after a winter's

teaching, capability had been developed to make many worth half pay.

As this movement was distasteful to the unions, these young men failed of employment, as Mr. Auchmuty thought possible. This capable man started building himself on larger plans, employed these men under most competent, skilled mechanics, with advancing pay according to their increase of value. Of the more than one thousand men thus instructed in the last four seasons, it seems not unreasonable to suppose that not only has he put these young men on the road to self-help and help of others, but has saved some from the life of a tramp, or from support by the state.

The needed increase in the capacity of his own accommodations for his increasing numbers gave this mechanical prophet a chance to demonstrate, before the eyes of the old school, that when mechanical instruction is begun with an apprentice, without the use of his time in running errands, and with the stimulus of numbers at the same kind of task, his daily adding capability can show itself in his own school by doing the very work he hopes soon to do outside. Hence, in the enlargement of accommodations that Mr. Auchmuty made, the work of brick and iron, carpentry and paint, was mainly done by the pupils themselves. In this way the accommodations have been greatly enlarged. The assembly-room, with its lessons in plan-drawing, the brief lecture on many points connected with the various kinds of business in which they were thus gathering knowledge, the incoming advanced pupils showing superior work in higher grades,—all this contributed a power in effective



organization and stimulus, copied no doubt in part from the method presented in the public school, but applied in this new line of mechanical education with an effectiveness, economy, admirable result, of which we do well to take note, that in the language of other masons than brick we may "govern ourselves accordingly."

The type of school here indicated, though enlarged to take in other branches, and to a great extent those pupils of more finished preparatory training, and supported in great part by the founder, Mr. Pratt of Standard and Astral Oil fame, is the Pratt Institute of Brooklyn; taking in not only its evening classes at moderate expense to the youthful day laborers, that such may add to their power and knowledge, but furnishing a means and incentive to the well-to-do; to those who have special likings for mechanics, or fine art in its many accomplishments, and who, not employed in literary labor, despise a life of inactivity and good-for-nothingness,—this great school furnishes an opportunity in the daytime for many a kind of knowledge in handicraft, suited to previous education, to the age, or to the desired family service or the possible need.

In the capacity and directive power of the teachers, in the energy and courtesy of the pupils, we have an example of a school of an exalted grade, and of a kind in the totality of its ministrations to the public to fill us with just pride.

The founders of these have built their monuments in great and most intelligent benevolence. When we see the changed and still changing conditions of society in our country, the Southern half of it with its struggle to wipe out the effects of slavery in many ignorant whites and millions of blacks, and know

that the power to rise is largely the power to do, we shall not be able to escape the conclusion that this great section, equally with the North, must put its thought into the problem of industrial training as a part of the instruction that both races need.

The territory is abundant. Forest and field, mine and quarry, await the possibilities of yet more rapidly advancing wealth, human comfort, and a more general living in the higher departments of man's being. Some may advocate a large outside expenditure of money wrongfully accumulated in the government vaults. Normal schools need indeed to multiply ; and every state has the ability, or nearly the ability, to supply all that it needs. The industrial training, already present in a part of them, should belong at least to the elementary course in every one of them. The application of this to the common arts, especially of garment-making and repair, in schools of grammar grade, is possible, and perhaps without additional teachers. In the large towns and cities it is also plain that serviceable lessons in cooking and laundry work could be easily added, with no excessive cost. The naming of petty schools as colleges and universities could well give way to a truer naming, in accord with present performance and the recognized need. Not one white man in five thousand comes to university training. Not one black man in ten thousand has at present any use for one. The successful harnessing and working of a mule have developing power for caution, strength, and persistence. The skilful handling of plough, plane, hoe, and trowel, with close attention to the rudiments in the common school, will build better houses and raise better crops than the remote

districts have thus far known. The young darkey and his ragged parent should be sewed in. Their patriotism is unquestioned, but they should not have so many flags flying. Growing expectations in modesty demand it. The colored girls can be made equal to the repair. As a necessary discipline to productive power, the young, both black and white, should be in school in term-time with punctuality and cleanliness, and acquire as much as possible,—and the possibility is not a little,—the habits of order, obedience, and application. These are hard lessons for a part of the blacks: they are good lessons for whites, the world over. To carry this out with earnest fidelity, with the philanthropy that is far seeing but determined, and is not going to wait ten generations for better habits, may require some sacrifice of young hickory at the father's cabin, and at the school-house also. Is it not far better than to turn bad subjects loose on the community, to become the "plug uglies" and "dead rabbits" of a great city, to be dealt with in prisons where confirmed habits are rarely changed? Amiable grandmothers in skirts and trowsers will say that compulsion, even to physical force, is going towards the Dark Ages, but the great bulk of the community have clearer perceptions. They want to know of teachers whether they have well defined and high purpose, knowledge, evenness, fairness, high moral character. Severe measures can be and are eliminated by degrees. They disappear in the management of the elevated. Thousands of teachers need to know the demand. The well prepared alone, of black or white, should enter. The reforms wanted are large. The night-prowling and noon-sleeping should stop. The last of the wild wail

that no musician can follow should give place to music in the major scale of modern Europe. The divorce of morals and the thing they call religion should cease. Freedom can then actually begin. If they will have it, 't is themselves must strike the blow on wood, stone, brick, and iron. The cabins can be repaired to keep out part of the water. Houses can be built so that on entering you shall be sure that you are not out of doors, and tens of thousands of yet better ones built.

The consumption of these people can and should go greatly beyond bacon, corn, tobacco, whiskey, and watermelons. They must be asked, urged, and, in case of all the youth, compelled to adopt the habits of the advanced modern civilization. Their strength is equal to it. Happiness of a higher type will follow. The leaders thereto should be the foremost of their own race, well trained,—the best, also, of the white race,—and well backed by state and municipal authority.

The productive and consuming power can be enormously increased. The common school, as we have had it here, is not equal to the demand. Tens of thousands among us have discovered that. With altogether different antecedents—not to dwell on race quality—it is still more true for them. The interwoven industrial element is an absolute necessity to carry them forward.

Such varied training, demanding attention and thought, is promotive of mental power. It does not culminate, indeed, in the same facility of linguistic expression as school-training in the past; but it calls, in its progressiveness, for such thorough seeing before doing as keeps active the power of comparison and judgment.

Could a man thus educated, though without any considerable power of report, be suddenly endowed with speech equal to the scorn of his soul at the shortcomings of many of the so called educated, it would not only be a lasting lesson in English, but a reverting to industrial training of early days. Where these, as in cities, are impracticable, there would be such an eager seeking for substitutes as would in their application rid the country in a generation of the major part of the incompetent, that is, those who have learned to do nothing. It would add to a just self-respect, for this goes with a knowledge of power. It would add greatly to human comfort, and disgust at semi-savage ways; and such can be found in the North, and among half the negroes in the South.

The whole is a consummation devoutly to be wished. He is engaged in labor worthy of his times who shall try to bring it to pass.

DISCUSSION.

HON. JAMES MACALISTER, Superintendent of Public Schools, Philadelphia, said that he did not bargain to take Superintendent Seaver's place, but gladly did so since he had learned that the establishment of a manual school in Boston was the object which occasioned Superintendent Seaver's absence. Unless manual training is based on common-sense, it has little show. Of many arguments in favor of this movement, he made first its relations to real life, as all education, whether higher or lower, must be real. Manual works produce a large part of human culture, happiness, and well-being. Goethe, master of

culture and refined type of human achievement, said substantially,—“ In the end we use only so much of our culture as we can practically apply.” Mr. Mac-Alister was pleased to see manual training on the programme. The National Association of Superintendents had alleged that it rests on bad psychology, pedagogy, and method. He contemplated no outside view ; did not propose that masons and artisans were to be the definitive product. Mr. Auchmuty was indeed doing a grand work ; but the true purpose of manual training is to be more inclusive, more generous in culture. There is a natural fear of new methods, but this is destined to elevate the teacher’s work and bring in a higher civilization.

Rev. JAMES B. TAYLOR, Principal of the Berkeley School, Boston. As it was yesterday that I was asked to take Mr. Robinson’s place in this discussion, I have had no time for serious thought on a subject about which I have no practical knowledge, but in which I have much interest.

The teachers of New England, now gathered in Bethlehem from six different states, may well believe that Boston is becoming seriously interested in this educational movement, when the leading address on the subject is by one of her school-masters, and the discussion of it is given to the Superintendent of all her public schools (who, though absent, is on record in his last report as favoring the establishment of a manual training-school in Boston), and still further support is given to it by the principal of one of her private schools, who might be supposed not to have any professional interest in the matter.

But born and reared in Boston, where, as Mr. Goodrich, of Salem, said yesterday, the city boy shows far less manual dexterity, though perhaps more intellectual keenness, than the country scholar, I have felt a decided interest in this subject for several years, and have realized the need of action and adoption, in city education at least.

The readiness with which my partner, reared on one of these New Hampshire farms, meets any of the thousand and one small difficulties, requiring manual dexterity, that are constantly arising in school, home, or garden, where I could only look on with good-natured envy, or call in the carpenter, adds further point to my convictions. Let me just add in passing, that on reaching his camp last summer with a party of boys, and finding the carpenters behind their contract in the construction of a small house for rainy days, he went to work and hung window-sashes and constructed stairs for the first time in his life, from the general knowledge of tools and materials which he had acquired before going to college, and, what was more, he set the boys to work with plane and saw to help him. Such outside ability in no way hampers knowledge of Latin and Greek. It only tends to show how much more preparation for a comfortable, happy life, wherein a man shall be self-reliant and master of himself and surroundings, might be put into our educational training, especially in our city schools. So much was I impressed with this idea three years ago, that I wrote Gen. Walker, President of our Massachusetts Institute of Technology, to ask if he would allow one of our classes to do manual work under instruction in the training-rooms

of that institution ; and he replied that their classes had increased so much in numbers that all possible space and time was taken up. This is another straw showing the trend of education. That Institute course is a very arduous one, and yet, new as the Institute is, comparatively, its classes almost rival those of Harvard in numbers. A few weeks ago, I attended a meeting in the great hall of Gen. Walker's institution, to hear the report of a committee on the formation of a society to foster the growth and adoption of such ideas as you have heard expressed in the address of Mr. Hardon ; and such was the feeling at that meeting, that the society took on a national rather than a local spirit, and Hon. Mr. MacAlister, of Philadelphia, who has just addressed you, and Gen. Walker, of Boston, were put at the head of the organization, Mr. W. E. Sheldon, ex-President of the National Association of Teachers, assisting in its formation. This meeting and its proceedings may be considered in some respects an antidote for the unfavorable decision reached by the late meeting of superintendents in Washington, to which Mr. MacAlister has just referred.

Further indications of the wind in our quarter are seen in the existence of a private school for manual training of Back Bay boys in vacation time, and of another vacation school of the same nature for the poorer class of boys in Newton, one of our suburbs,—a school sustained by the Ladies' Social Science Club of that city.

Again : I notice two lengthy articles on this general subject in the Boston *Sunday Herald* of this week,—one, a column editorial on the American boy, and

what to do with him ; and the other, an elaborate article, by an expert, on manual training and industrial schools. I wish I had time to quote freely from both of these articles, but I cannot. The first article compares the American boy of fourteen with the French boy of the same age. The latter knows the elementary work that the former has acquired, and something of his special line in life besides. It goes on to claim for the boy who intends to enter mechanical and industrial callings the same degree of preparation at public expense that is now given to one who aims at professional life, on the ground of American fair play ; and I confess I do not see any adequate reply to the charge of partiality and preservation of the mediaeval spirit of caste in educational curricula. The main point of the other article is, that something must be done to take the place of the old-time apprentice system, by which boys were fitted by good masters to win their way in life. It is even claimed, somewhat too boldly, probably, that educational expenses might be reduced by the establishment of such schools, since each boy would learn quickly in his natural line of study, and so the pace of each class would be that of the bright boy, instead of, as now, that of the dull one, the bright boys wasting much time thereby.

Mr. Robinson, whose place I am taking, had intended, I am aware, to make especially this point. The only chance he can see for manual training in *country* schools, is in connection with the study of physics ; *i. e.*, the training of boys to construct their own apparatus, by the use of a work-room provided with benches and sets of carpenters' tools, where the pupils, under the teacher's direction, can proceed to

prove the laws of science and illustrate the properties of matter. A carpenter or machinist, or both, might be employed a portion of the time to assist in construction. Of the value of this suggestion I will not venture to express an opinion.

PRESIDENT GEORGE F. MAGOUN, of Grinnell College, Iowa, honored this Institute as the mother of institutes. He was one of the earliest advocates of industrial training. Forty-five years a voluntary exile from New England, he went out as a teacher, became a pastor, and is now a college president. One of the finest manual schools, that of Chicago, is under the guidance of a classical man. This kind of training he deems essential to the completeness of education. And yet, we are only in the nineteenth century taking up a drop-stitch, which was in the Greek fabric as far as Greek thought could go. It is too late to deny that industrial occupations do develop intellectual power. This subject, moreover, is not separable from the topic which follows,—Education of the masses. We are not yet impartial in our distribution of the public funds: the industrial schools have not their share. It is not equity to train lawyers, physicians, and others at the public expense, and not the artisan. I do not so much care about the professional aspects of this question, as about the proper care of all classes of the community political.

VIII.

THE EDUCATION OF THE MASSES.

BY GEN. THOMAS J. MORGAN, U. S. COMMISSIONER OF INDIAN AFFAIRS, WASHINGTON, D. C.

[AN ABSTRACT.]

Cardinal Manning, in a memorable article published in the *Forum* for March, 1889, says (page 64),—“The legislature of Massachusetts, two hundred years ago, enacted that ‘the whole people must be educated to a certain degree; all children shall be educated at the public expense, irrespective of any social distinction.’” The cardinal’s comment on this fact is this: “So long as the social state, by uncontrollable laws, develops social inequalities, it is useless and perilous to educate all men as if society were a dead level, irrespective of any social distinctions.”

The theory upon which the American public school system rests is precisely that enunciated by the words quoted from the act of the Massachusetts legislature of two hundred years ago. It is the education of the masses. “All children are to be educated irrespective of social distinctions.” No scheme of universal education, without regard to sex, race, color, or social distinctions, such as that now being tried on so magnificent a scale in the United States, has ever been attempted in the history of the world.

The boldness of the conception may well challenge

thought. Ignoring all those differences which separate men in life, the public school receives children from every conceivable class and condition, and aims to give to each and all alike, in proportion to his capacity to receive it, at least the rudiments of a liberal education ; to arouse in each all latent powers of mind ; to awaken a thirst after knowledge ; and to put into the hands of each the key to the treasures of human knowledge.

It is not at all surprising that there should be thoughtful men ready to declare the scheme impracticable, or even "useless and perilous." A deviation from the course of human history so radical cannot expect to pass unchallenged, but must be ready to justify itself by an appeal to reason. It cannot appeal to history, since it is yet an experiment. Even in Massachusetts, after the lapse of two hundred years, the system is not fully operative, and some time must yet elapse before all the children of the commonwealth shall be educated to any considerable degree at public expense. Unless the scheme for the common education of the masses, without regard to social distinctions, can be justified by reason, it must be abandoned.

The justification is found in such considerations as these :

1. In the doctrine of human equality. "All men are created equal," not in individual endowment, but in the generic elements of humanity. In spite of all individual differences, "A man's a man for a' that."
2. In the doctrine of the "inalienable rights to life, liberty, and the pursuits of happiness." Education touches the very fountains of life, quickens the ener-

gies, greatly enlarges the range of sympathy, and multiplies the modes of activity. Education is essential to true freedom; it adds greatly to the quality and quantity of human happiness.

3. The theory of the republic rests upon the cornerstone of man's individuality. The man is the political unit. Citizenship pertains to the individual, and not to his station in life. The education of the masses is essential, that they may enter into their privileges of citizenship.

The grave responsibilities of government, involved in the duty of voting, of jury service, of law-making, and of executive labor in its various forms, that may be assumed by or be laid upon each citizen, necessitates the education of all citizens.

4. The results already attained in America in the steadily rising average of popular intelligence afford strong evidence of the possibility of the effort to educate all alike. It is not "useless."

5. The elements of discord in America, the heterogeneous races that clash together here in the struggle for existence, the unrest of the laboring classes, the power of the ballot lodged in the hands of the laborer, etc., all call for the education of all alike and all together, in order to insure that sympathy and community of feeling that is essential to the equitable adjustment of differences, and to harmonious association. Education renders the heterogeneous homogeneous. It is not "perilous" to educate the masses: the peril lies in failing to educate them.

The spirit of the nineteenth century, that finds its completest expression in our republic, the autonomy of the individual, the right of private judgment, the

equality of rights, privileges, and duties,—a spirit that has revolutionized governments, and radically changed social relations and social institutions,—has created the public school system for the education of the masses, and finds in that system its own strong support and defence. The education of the masses is reciprocally the effect of this spirit, and the indispensable condition of its continuance.

DISCUSSION.

MR. FRANK A. HILL, Master of the High School, Cambridge, Mass. In an unguarded moment, Mr. President, I said Yes to your seductive invitation. That the mountains thus far have had no charms for my perturbed soul,—well, sir, I attribute it wholly to you.

I do not see, sir, how one can do much in ten minutes with “the education of the masses.” Perhaps there is time to say that General Morgan is right when he affirms that the great peril of our country lies, not in educating the masses, but in not educating them.

I do not quite like the word “masses.” It is too suggestive of class distinctions. There is danger of restricting it to the struggling many; whereas, the state, the American state, in an important sense, knows no rich, no poor, no high, no low. It is deeply concerned with the education of all its members: these are the true masses;—and it is so concerned, for the simple reason that its preservation and welfare are dependent upon their civil and political action, and therefore it is bound to insure their intelligent action.

It is just as important for the state to care for the

training of those to whom wealth, or family, or position has given unusual opportunity, as for the training of the so called masses. We have, indeed, much to learn from old world countries, whose forms of government we have discarded ;—nevertheless, what a pitiable type of American citizen is your aristocratic young man, who looks upon voting as vulgar, republicanism as a failure, and monarchy as the only sensible government for the common herd !

But our young men of wealth and leisure, loyal in heart and work to the highest American ideals of manhood and sovereignty,—our Lodges and Roosevelts, of whatever creed or party,—what pillars of strength they are to the state that enjoys their allegiance !

It is in the state's instinct of self-preservation, I repeat, that I find the foundation of its right to insist on certain things in the education of the masses. It may justly claim, for example, that its members shall be self-supporting, that they shall possess intelligence in various degrees, that they shall be honest and pure, and that they shall be loyal to its institutions and genius. Just here comes in another right. I claim it myself: I respect the claim in others. It will be a sad day for our country when people cease to assert it. It is the right of the parent to guard with jealous care the education of his child. We have now the state claim and the parental claim. Each has a solid foundation. The integrity of the state demands the assertion of the one claim ; the integrity of the family, the assertion of the other. In the main, each party concedes the claim of the other. It cannot well be otherwise, for the state and the parent are largely one. What is the action of the state but that of its citizens

who vote? And who are its voting citizens if they are not largely the parents of the children?

But sometimes the state and the parent do not agree. Then the two claims require adjustment. Here we come to great and delicate problems in the education of the masses,—their moral and religious training, the parent's right to the full service of his young, un-educated child, the authority of the state over private schools, and many others.

Waiving the other problems, consider for a moment the relation of the state to private schools. If the masses are to be educated, it must be by concerted action, *i. e.*, by the state. There is no other way. Experience and common-sense alike teach us that if private schools were the only means of education, large numbers would not be reached by them, and illiteracy would grow. This illiteracy the state cannot and will not permit. The public school system must be upheld so long as we prefer the ballot to the sword. Now parental claims and interests have found considerable expression in private schools.

It is sought to bring up children in some faith, to instruct them in branches or by methods different from those of the public schools, to subject them to a heavier or a lighter strain, to withdraw them from some objectionable environment, to put them under more polite or fashionable conditions. Now, my philosophy tells me that the existence of these schools is not to be deplored. On the contrary, we cannot well dispense with them. They are a sort of gauge, or meter, or indicator, by which we may know whether the public school is near to the wants and affections of the people or not,—whether, in short, the public school is

what it ought to be. But apart from this consideration, some of them are doing a noble service for the public. We all know that the public school is somewhat conservative ; it is not easily swerved from established routes ; it is rather averse to experiments, especially of the expensive sort ; it reflects public opinion indeed, but public opinion crystallizes slowly.

Now, we have an increasing number of high-souled, public-spirited, and wealthy men, who have advanced thoughts on educational matters,—thoughts that the public cannot be expected to endorse until their wisdom has been proved. The private school gives such men their opportunity. School boards, public prejudice, meagre appropriations,—these obstacles do not exist. The coast is clear. Let the pioneers begin. The public has everything to gain, nothing to lose, and therefore it should applaud their experiments.

There is, for instance, this growing idea of manual training in educational schemes. Shall the state adopt it for the masses? There are too many problems to be solved before an intelligent answer can be given. A wrong answer would be full of disaster. What a capital field is here for private enterprise to work in,—the solution of some of these knotty problems. My close relation to a unique experiment in manual training has led me to think somewhat upon the debt of the public to some of our private schools. For the past year, fifty of the English high school boys of Cambridge have been members also of the Manual Training School for Boys. Next September one hundred of our boys will be in the training school. The founder is a young man of ample means and rare public spirit. He has deep convictions about the training of the hand as well

as the training of the head. He knows that the public is not ready to assume the responsibility of ordering such training: so he has erected his work-shop, put in his boiler and engines, set up his benches and machinery, and fully equipped what is probably the finest establishment for its purpose in the country. And he says to the city,—“ These privileges are free to your boys. If you will provide for their text-book instruction, I will provide for their manual instruction, at least for a number of years.

Thus we have in Cambridge a new course of study for boys, a part of which is pursued in a public school, the rest in a private school. The Rindge trustees have no control over the former; the school board, no control over the latter. Each school is independent; each has its own head; but each recognizes its duty to stand by and uphold the other. The good book says, “ No man can serve two masters,” but that, you recall, is when the masters do n’t agree. It becomes Cambridge, at least, to recognize with gratitude its debt to the private school.

Now, I believe it should be the policy of the people, while standing steadfastly by their system of public instruction, to welcome in a catholic spirit private educational enterprises. Such enterprises should be unhampered and free to the most generous extent. I know of but one principle of limitation the state has a right to apply to them, and that comes, as I said at the outset, from the state’s instinct of self-preservation. It has the right—the founders of most of our private schools do not simply recognize it; they are foremost, like Mr. Rindge, in asserting it,—the state has the right to insist that the masses, whether in public

schools or in private, shall be trained in those elements that contribute to intelligent and loyal citizenship. It has the same right to insist on this that it has to enter your home or mine, to take your property or mine, your boy or mine, and impress them, in a crisis, into its service,—a right it should firmly but not obnoxiously assert, although, let us hope, it may seldom have occasion to enforce it.

MR. G. T. FLETCHER, agent of the State Board of Education, Northampton, Mass.—The law relating to the necessity of general education, passed by the legislature of Massachusetts two hundred years ago, has the wisdom of history and the inspiration of prophecy, because it combines all that could then be known of the relation of free schools to free government with what we now see to be necessary for the preservation and continuance of national life.

In this country the individual is above the state. The government is for him, not he for it. Said Lincoln,—“This is a government of, by, and for the people.” Yet the citizen is more than the man: he is the individual plus society—man in his totality. The best education for the person is the best for the state. Our public school system has been justly praised, but its practical operation has not been fully considered here, and we may properly ask if it is doing all that is claimed for it, and all that needs to be done.

It proposes to provide the means of education for citizenship at the lowest possible cost to the citizens-at-large. For this reason it is supported by a general taxation of property for the individual and common

good. The state or the town raises money to build school-houses, to educate and to employ teachers, to furnish supplies, and to provide school supervisors. This is wise, because many parents are not able, and others are not willing, to provide adequate educational means for their children. Taxation for the support of schools, poor-houses, or prisons is inevitable. We can only elect for which we will be taxed. Wealth is so made to contribute to general intelligence in Massachusetts that one eighth of the cities and towns of the state pay about seven eighths of the taxes of the commonwealth for the support of schools. In some of the manufacturing towns, twenty per cent. of the people pay eighty per cent. of the taxes. Thus capital is made to assist labor. Still, for various reasons that cannot now be specified, very many children are not attending the public schools, and are not receiving other educational advantages.

Mr. Fletcher contended that in manufacturing communities, where children are required to help support the family, half-time schools should be maintained, and attendance on them be required on the part of all children under sixteen or eighteen years of age. He claimed for this system, that schooling for three hours per day, forty weeks per year, for thirteen years, would be sufficient in quantity for those who do not intend to pursue a literary life. It combines daily work with study, enables pupils to learn some useful trade while earning their living, and has all the advantages of the old district school in combining labor with learning, and in continuing the period of study into the years when greater maturity of mind renders school work much more profitable than during early childhood.

For those who can attend school during the full time, as well as for those in the half time schools, some revision of the courses of study is needed. Nearly all of the branches taken have considerable value, but non-essentials are proving very wasteful of time, while some studies of special importance are omitted. For illustration of this waste, it is enough to specify arithmetic, which, as generally taught, consumes much more time than can be profitably devoted to it. Work better in quality and less in quantity is needed. Too much prominence is given to some subjects, regardless of results obtained. Teach children to observe, think, and express, and their powers will be developed. The youth who has learned to read, and to love nature and good books, has laid broad foundations for the education of life.

Moral culture must receive special attention, as intelligence without virtue is not conducive to good citizenship. The public school is not doing all for the masses that needs to be done educationally. Some reforms are necessary. The principles are sound: in application, improvements are necessary and possible, and compulsory attendance is essential.

HON. JOSEPH D. TAYLOR, M. C., of Ohio, was invited to participate in the discussion. He said that he was in Congress a friend of education. The education of the masses is too great a question to be discussed fully in five minutes. Greater changes have been made in the last quarter century than in all the world before. What has the future in store? He complimented the ex-senator here as a great leader, who will triumph. He cared not about the word

"masses ;" but if he could not control immigration, he would shut it out, and the Chinese are not the worst element. He would always employ the American boy in preference to the boy who has no sympathies with our institutions. Money enough had been spent on the Indians to put them all into palaces. He would strip off every blanket from them, and would compel them to get a suitable education, using the army for the purpose if necessary. He had visited them : only twenty-five or thirty scholars in a school ! The half-breeds would not play with the full-bloods ; their sets kept separate. The right to tax is followed by the right to compel. Unless the foreigners who congregate in masses, and hold the balance of power, are educated, I tremble for my country. There is little in New England to fear. We must be more heroic in the future than in the past.

IX.

THE DYNAMICS OF SOCIAL PROGRESS.

BY PRESIDENT ALBION W. SMALL, PH. D., OF COLBY
UNIVERSITY.

This paper is a fragment. The title indicates the scope of the whole discussion, of which the present essay would form a part. The theme of this portion is more properly,—*The Educational Factor in Social Dynamics*.

The talent for misery is the fulcrum of progress. “In the beginning,” says the gospel according to Schopenhauer, “was appetite, passion, will.” That appetite had not fed; that passion had not flamed; that will had not decreed. In the unexplored material of infinite might-be’s, appetite discovered food, and passion fuel. The mist of unthought thought, of un-felt feeling, of unwilled will, became self-conscious potentiality of gratifying origination and creation. Imagination of the possible changed the actual into the miserable. Ennui became maddening, lack became ravening. Then will wrought, that appetite might gorge, and passion burn, and misery rejoice. Thus the will, enticed by the unrealized, began to fashion the cosmos of matter into the cosmos of mind. The leverage of desire began to lift the real towards the ideal.

This may be called the nebular hypothesis of society. I do not refer to Schopenhauer as an authority, and I

am not at all concerned to inquire whether the thought which his words suggest to me is exactly that which he intended to express. Enough, that in the world-crucible misery is the condition of any reaction. Misery generates desire, desire breaks up ten thousand miseries of mechanical union, and ten thousand free affinities recombine with naturalness and satisfaction. The power of sitting in judgment upon the visible, and of suffering because it contrasts unfavorably with the invisible, is the force in social chemistry behind movements that involve the action of all energies superior to the impulses of mechanical motion.

To translate these abstractions into more concrete terms:—Social progress, so far as it is not the resultant of physical action, or something closely analogous, is the reorganization of human relations by more or less intelligently directed efforts to exchange discomfort of some sort for comfort. Pain seeks relief; want seeks satiety; repression seeks freedom; helplessness seeks resource; unreason searches after rationality; wrong creates demand for right.

This substitution of the better for the worse may proceed either by infinitesimal increments, or by seismic upheavals of society. The evolution of the modern city, with its pavements, drainage, lights, conspicuously designated streets, parks, water-works, rapid transit and communication, its sanitary, police, and charitable organizations, its graded schools and its ungraded churches, is an illustration of the former process. The historical revolutions, from the exchange of the judges for kings, to the exchange of emperors for presidents, and despotism for constitutionalism, are instances of the latter.

That status may become motion, belief must arise that existing conditions are tyrannous. The limitations of environment must oppress. Misery must goad to motion.

Individual misery is quickly and keenly felt and deplored. The blow or the fall, cold or hunger, gives pain and causes impatience without artificial cultivation of sensitiveness. Class misery, or mass misery, may long be endured without a thought of change, because, like these mountains around us, it is so bulky no one thinks of questioning its eternity. Witness, for example, the miseries of the present capitalistic organization of society. Within the recollection of men still young, a few eccentric spirits have begun to discover that society is suffering from a gigantic hurt, and they are to this hour hardly able to gather a handful of sympathizers with their vicarious endurance of misery.

Individuals are, at first, then, the organs of by far the larger number of social sensations. Multitudes do not realize that they are circumscribed and restricted in a thousand ways till individuals proclaim that paths are open to greater distances and in new directions. In the history of inventive enterprise, we find an uninterrupted series of illustrations. We do not complain that space and time oppose themselves to the exchange of goods and the communion of spirit, till individuals, after measuring and training physical forces, prove that these have imposed upon our ignorance, and that the difficulties are surmountable. Then we appropriate the services of steam and electricity, without acute sense of our need of them ; but long use develops dependence. When, at length, accident deprives us

of their assistance, we see at last how narrowly we had lived without their enlarging influence.

The most radical social reorganizations, however, are not the devices of individuals ; they are the result of a change of mind, a re-aiming of desire, a redirecting of effort by associated units. All revolutions, from discharges of thunder-bolts to dethronements of dynasties, are evolutions. Not the disputatiousness of a German monk nor the uxoriousness of an English king, but the dawning self-consciousness of two nations, made the crises of 1521 and of 1529. Society prepares its revolutions through the medium of individuals who feel the common woe and long for the common weal. Let us call them idealists.

Idealists are the social nerve centres, both sensory and motor. The idealists of whom I am thinking are men who have thought out something more perfect, which they are impatient to put in the place of something less perfect. The idealist is not contented to copy old, defective models. He is always trying either to equal a perfect standard, or to put into his work ideas which he, at least, has never realized. His ideals are not illusions, any more than the plan for the house you intend to build is a castle in the air. The idealist is no more a visionary than is the architect. The idealist is not a dreamer, constructing worlds in which water runs up hill, and vice promotes health, and laziness instead of labor is the source of wealth. The idealist is not a Don Quixote, trying to make himself the high-water mark of the course of events ; nor a Mr. Micawber, waiting for something to turn up. The idealist is a man of strong understanding of present realities. He sees that if

some particular means were geared to their work with more reference to their nature, the world would be a more comfortable and profitable place to live in. He finds the chief executive of a great nation, for example, reduced to the function of a patronage distributor. He detects the social damage, the waste of energy, the political wrong, which the multitudes have not perceived. Discovering such misapplications of social power, the idealist tries to point out the method of adjustment. Not a croaker, an alarmist, or a pessimist, but the seer of persistent fault, the prophet of possible improvement, the pioneer of reclamation and reconstruction, he is incarnate enterprise and courage and progress.

Herein is all that is true of the "great man" theory of history. Great men are localizations of social sensations and perceptions. They are not so much social reagents, as phenomena in social reactions. They are less the causes of heat in the social cauldron, than the first bubbles that betray the presence of heat to the degree of seething. Great men focalize diffused force. They become the rallying points of unorganized energies. They are digests and codifications of scattered and unrecognized social opinion. In them society sees itself in new phases. In so far society first attains self-consciousness in them. They are the most comprehensible social self-assertions. They are social mercury. In them influences are patent which in society, as a whole, are latent.

If I have made the thought intelligible thus far, assent will be easy to the further proposition, that *social progress under Democratic government involves, first, development of the popular talent for*

misery; and second, or conversely, the development of popular idealism. The individual idealist is an agitator. Progress arises only when agitation disturbs the molecules of the social mass. It never comes permanently from an external impulse. Society is not a projectile, but an organism. The enlightened despotism which Aristotle proposed, and which Frederick the Great in a measure realized, may organize and direct society in accordance with ideals which only meagre minorities can comprehend. Democracies can progress only when consciousness of misery and imagination of means of relief sway masses numerous enough to control a permanent balance of power; nay, in many cases, intelligent and determined idealists must compose an actual majority. The Conqueror could nationalize the land of England by a *coup d'état* at Salisbury; but land leagues, and race enthusiasm, and humanitarian sympathy and support in every civilized nation have failed to wring from the democratic empire of Great Britain deliverance of the Irish peasant from the thraldom of rack-rent. Our nation in arms could destroy the legal institution of negro slavery, but our nation in peace has not so much as heard that there is the economic institution of industrial slavery, more inexorable and more godless than the slavery we have destroyed.

In order that society may will to progress, and may achieve progress in the direction of its will, it must know itself. "*Gnothi seauton*" is radical wisdom for democracies as well as for individuals. From Plato to Cicero, for example, reflecting minds were familiar with the idea of some kind of immortality as the privilege of philosophers. During the same

period, on the other hand, the essential similarity of the common man and the clod he trod was more universally assumed by thinkers. It is no wonder that the era, though crowded with great events and signalized by great men, was for Mediterranean society, as a whole, an era of decline and despair instead of progress and hope. Progress in civilization must lag until the destiny of every man to spiritual life and achievement and enjoyment is the axiomatic major premise of popular social philosophy. Peoples will remain the sport of demagogism until majorities know enough of moral fact to resent unrighteousness as an outrage against the hygiene of society. Words and traditions will intimidate into dumb delivery of advantages to social highwaymen, until we are as familiar with the rights involved in the facts of human brotherhood, and the essential equality of all men in claim upon opportunity to develop manhood, as we are with the demands of the body for food and sleep. Political quackery will continue to dose us with the nostrum of popular education, compounded of reading, writing, and arithmetic, until we learn that such prescription no more strikes at the root of the matter than injections of morphine cure the opium habit. The fulcrum of social progress is *consciousness of misery distributed among the social atoms*. The desirable misery results from perception that any truth affecting human welfare is disregarded in the social order. That man is a spiritual being, but in the vast aggregate confined by convention and satanic contrivance, rather than by necessity, to the existence of a thing; that man is a moral being, with no right to sensuous gratification which limits his or another's

spiritual development, or annuls or weakens moral obligation ; that man is an industrial being, designated by faculty and capacity to the exploitation of material resource, not to the end that warehouse and palace and bank vault may loom and bulge with material products or their representatives, but that this footstool of God may become the footstool of a race of men grown like to God ; that man is a political being, associating with his kind not as gamesters congregate to plunder each other by combination of wit and chance, but constituted in nationality in order to find the means, which would otherwise fail, to demonstrate spiritual worth and exert spiritual power ;—these are some of the knowledges which belong of right to all men. Only through the understanding of these, with their content and their corollaries, can men become susceptible of that benign misery which is the prerequisite of progress.

We have looked at human concerns in fragments and scraps. We have developed such men as Virchow and Pasteur and Huxley, who have heroically spent their lives, not upon the Iota subscript, but upon microscopic particles of human tissue compared with which the Iota subscript is massive. In social science we have likewise developed multitudes of microscopists, and no one could be more unwilling than I to deprecate their work ; but my contention is, that we have failed to develop the proper proportion of men who look at life in the large with any approach to precision. We have analyzed and dissected certain social tissues, but we have only superficially glanced at the great social organism.

This extended introduction is purposely propor-

tioned to the whole subject suggested in the beginning, rather than to the special topic to which I shall now confine myself. Intermediate steps are not necessary to the considerations that I wish to urge in commanding to your attention an ideal of education which makes its object nothing narrower nor less comprehensive than an extension of the whole frontier of social possibility. I have selected the present line of thought, because, in studying institutions founded for the sake of social amelioration, I have found that none are so strategically situated as those whose methods are educational. If society is to progress, rather than gravitate upward and onward according to the unformulated law of moral attraction, its teachers must be its great men, its nerve centres, its vicarious sufferers, its pathfinders and adventurers into unvisited regions of social experiment. Large ideality; precision in analysis of social status; alert discrimination of social tendency; accuracy in detection and interpretation of social signs; sympathy with the victims of social wrongs, and with the sufferers of hardships entailed by irrational social organization; vigorous constructive imagination trained to recombine social materials into designs for better organizations,—these are the essentials of the ideal pedagogical equipment, the presiding faculties which turn to worthy use all subordinate and technical facility.

When the Spartan state took charge of education and trained all youth for the profession of war, its ideal was strictly defined, and its means were appropriate to the proposed end. The organizers and agents of Spartan rule were in no apparent uncer-

tainty either about the proper subjects or the proper methods of state action. Our American states assume the task of educating for social life at its best, but we have not yet even entered upon a systematic inquiry into the particulars embraced in the constitution of the ideal society. It has never occurred to any but a select few that the work of education calls for workers with outlook broader than the horizon of the school-room platform. If we discount the tithe—to speak most liberally—of master minds that are considering education broadly, we have left in the United States a body of pedagogical hack-workers, either utterly ignorant of the ultimate relations of popular education, or so indifferent to them that they have never approached the opportunities of their profession under the inspiration of an intelligent purpose.

To be a little more definite: The task of social leadership is the creation of profound social discontent, through the discovery and demonstration of human relations out of joint. If this work is not begun for the masses in the common schools, it can nowhere else be safely done, and it is difficult to imagine that it can anywhere else be even attempted on an adequate scale. The systematic evolution of a higher from a lower, a better from a worse, social order can by no means be made so sure, as by rescuing some of the years wasted between the fifth and the fifteenth upon sterile reading, writing, arithmetic, and geography, with a little grammar and physiology, and devoting them to moral and social philosophy!

I will not stop to fortify this apparently untenable position against assault. The points of attack are

easily anticipated, and it would be a simple matter, if time allowed, to withdraw from these insecure outposts to the impregnable portion of the field. I prefer the bolder alternative. I maintain that the mind of a child can take in profounder truths about the structural facts of society than our school systems have ever allowed it to confront. If time permitted, I should argue at length, that, under a rational system of instruction and mental development, such prodigies as John Stuart Mill, discussing the laws of political economy at an age when most boys have hardly graduated from Mother Goose, would be less exceptional than typical. A child may learn about morals as exactly as about muscles. He may understand social as well as animal physiology. He might be made to comprehend the fundamental relations between the dividend and divisor in the mill, as well as between those in the arithmetic. The "law of diminishing returns" presents no greater essential difficulties than "Five from two I cannot take, so I borrow ten, etc." The real boundaries of social classes might be fixed in a child's mind as readily as the imaginary lines of latitude and longitude. While we are teaching that the formula for extracting the cube root is not a slot into which any fool may drop a nickel and procure the desired result, we might just as well be determining the political conduct of the next generation by lodging the revelation that laws are neither automatic administrative engines, nor charms with which to conjure good government.

I purposely leave to the gentlemen who have consented to discuss the subject, ample room at this point for criticism of detail. The main thesis may be reaf-

firmed in another form. Volitional social progress in democracies is conditioned upon popular insight into the facts of social relations. Democracies must be capable of distinguishing the accidental in social order from the essential; the conventional from the structural; the organized from the organic; the artificial from the natural; the legal from the just; the actual from the possible. Democracies must attain wisdom in social diagnosis. They must be able to discriminate between pathological and physiological conditions. Whether or not private property in land, for example, is a normal or an abnormal social growth, should be a subject no more obscure than the relations of the nutritive and vascular systems in the human body.

The proximate end, at least, of democratic education is, to popularize knowledge of these structural and functional phenomena of society, and of the truths which these phenomena contain. This is not to assert that politics and economics should drive other subjects from the schools, any more than a plea for the study of physics would be a demand for the abolition of mathematics. To adopt another figure: My contention is, that democratic educators should grasp for themselves a comprehensive idea of the architecture of the social structure upon which we are building at cross purposes and by rule of thumb. Having comprehended some of the principles to which all durable social building must conform, we may change much of our educational rough-hewing into artistic designing.

I cannot refrain from mentioning here the profound work of Prof. Lester F. Ward on *Dynamic Sociol-*

ogy. In spite of glaring faults, among which is gratuitous and illogical depreciation of Christianity, these two volumes are the most respectable attempt yet made in this country to found a science of society. Prof. Ward's discussion of the relation of education to social progress deserves to be recognized as the most comprehensive and systematic report of explorations among social phenomena that an American investigator has yet rendered. If I may assume your acquaintance with his work, I shall not need to argue that while pedagogical science has admirably wrought out the theory of *how* to teach, it has deplorably neglected the more fundamental consideration of *why* to teach and *what* to teach.

The quest of the ages has been for the secret of how to live this life for all it is worth. Each science that men have pursued has discovered some truth which will find its place in the completed revelation that will one day reward the quest. As yet these truths are the chaotic material of a cosmic Chinese puzzle, waiting for organization. A higher differs from a lower civilization in the number of these truths for which a permanent place has been discovered. For this reason the prescience of the Christian apostle, in discerning that "none of us liveth unto himself," was never more appreciable than to-day. It matters not how many truths about society are brought to the light of scholars' eyes by research, if they are withheld from the light of the people's eyes in the darkness of those scholars' libraries. The philosopher cannot enjoy the advantages of social progress, unless he reveals to society the path and the method of progress which he has discovered. The

people must be admitted to the Baconian laboratory, the Cartesian study, the Newtonian orchard, the Pisan cathedral. The esoteric mysteries of to-day must be the people's commonplaces to-morrow. The people must be privileged to learn from childhood what human power, or attribute, or capacity, or right is "cabined, cribbed, confined" by the existing social order. They must be taught to suffer individually from the common constraint, and to strive with the social whole towards the emancipation to which the very restraint creates a presumption of right.

For an all-round view of the subject upon which I have entered, examination of the educational function and value of other social forces, especially church and press, would be necessary. The time allotted me permits only these hints upon the possible dynamic importance of schools alone. I plead for a broader outlook than we habitually take over the field which our position commands. Whatever his technical preparation, the teacher has not the station from which he can apply his individual leverage with all its power, unless he has made himself a wise social philosopher, an idealist, capable of stimulating social insight and foresight in his pupils. No one can understand as well as ourselves the narrowing, dwarfing, belittling, shrivelling tendency of our profession, if practised without reference to the wider relations which the minutiae of the school routine affect. I maintain that until our schools are vitalized by a measureless infusion of thought material, which our machinery of thought form shall convert into social ideals, our schools will remain as far from their vocation, as factors in social development, as the

pedant is from the merit of the scholar. Mental calisthenics can never lift civilizations. If they could, the age of the Schoolmen would never have been called "dark," nor would the keen classical scholarship of nineteenth century Russian universities and Spanish cloisters be useless to the world. The secret of human progress lies in deciphering and realizing the thoughts stereotyped in physical properties and moral fitnesses. We have hardly formulated the comprehensive question of all science, viz., Is the world that man has made the world which these thoughts prove that God intended him to make? The bare statement of the question carries with it demonstration that all knowledge is the concern of all men. With this view of the province of investigation, what a gagging, fettering deception seems any scheme of education which fails to stimulate from the beginning the power to observe and reflect upon the deviation of man's building from God's designs!

Society has progressed thus far by butting against nature and being buffeted into precautions. The educator's prerogative imposes the duty of accelerating progress by showing society how to anticipate collisions with nature. Nothing short of fearless and ambitious assumption of the responsibility can save teachers from becoming trifling and petty.

Utopias, from the Hebrew prophecies and Plato's Republic and the New Testament to Edward Bellamy's Looking Backward, have wisely or ignorantly forecast the future. The wildest of them contains something to engage the attention of serious minds and provoke scrutiny of existing institutions. The divinest of them will forever show how to construe

other revelations. The immature science of sociology as developed from Comte to Lotze, not to mention the pseudo social science of Herbert Spencer, has already shaken the foundation of social opinion. The American Economic Association has entered into social inquiry with a boldness, a devotion, and a method which present some of the most hopeful symptoms in the contemporary thought of the United States. The national and state bureaus of labor are furnishing facts which are rapidly widening our social horizon. This body of thought about society, from Utopias to statistics, is the matter of supremest social concern. To open this thought to the popular mind, and to open the popular mind to this thought, is the mission of social leadership. The educators who grasp the situation and adapt their work to its demands will be the helmsmen of future civilizations.

DISCUSSION.

JOSEPH G. EDGERLY, Superintendent of Schools, Fitchburg, Mass. It is well to have placed before us, at times, ideals towards which we can reach. The essayist has well said that the idealist is no more a visionary than is the architect. We know that not always are the plans of either carried into execution, but these plans compel study in certain directions; they lead to research in fields that otherwise might remain unexplored.

The architect plans a building,—it may be one designed for public use, or for a private residence. It is then seen that the funds at the disposal of those

whose duty or desire it is to erect this building are insufficient; or that, however beautiful to the eye such a structure might be, it would not be well suited to the purpose for which it is intended. A modification of the plan must be made. The teacher is an idealist. He goes from a teachers' convention with high hopes, with the conviction that he can at once put in practice the methods that have so delighted him. He finds, however, that the school-room differs from the convention hall, and that there must be modifications to suit the time and place. This does not indicate that either the idealist or the architect is a visionary.

The young man studies medicine or law, familiarizing himself with theories which, when put to actual test in every-day life, fail to meet existing conditions. The teacher has his theories concerning many problems of school management,—the examination, the classification, the promotion of pupils, for instance;—but any teacher of experience will tell you that his views are modified from year to year; that individual cases arise for which his theories had not provided. This does not by any means imply that the lawyer, the physician, or the teacher is visionary, even though many plans fail of execution. These persons are better fitted to deal with realities than they would have been had they never dealt with idealities. This phase of the question deserves careful consideration. Teachers will derive benefit from a study of it.

To recognize the fact that we cannot always act in accordance with our highest ideals, is merely to say that we are human. When Abraham Lincoln became president, slavery existed in several states of

the Union ; and when some of the generals in the army determined to free some of the slaves, his command was, not to molest the system by which human beings were held in bondage. He was denounced for this ; and yet, in the light of subsequent events, it is seen that when he refused to allow freedom to be granted to the bondman, he hated the accursed institution as deeply as when he affixed his name to that immortal document with which his memory is to be associated for all time. Call it expediency if you will, call it time-serving, designate it by whatever term you choose, you cannot ignore your environments. An ideal, however, helps to understand those environments, to deal with conditions as they exist.

There is, apparently, no doubt that many of the subjects to which the essayist alludes can be taught in the schools just as reading, writing, and arithmetic are taught, and that the methods employed in teaching what are termed the common branches of study can be used advantageously in the imparting of instruction in those subjects that pertain especially to social progress.

Teachers know very well that the members of a school are not always in a frame of mind that enables them to derive benefit from the instruction given in arithmetic or geography, and the same may be said concerning the study of the structural and functional phenomena of society. There are times when impressions are easily made. The teacher must study his opportunity.

The essayist said that he purposely left to those appointed to discuss this subject, ample room for criticism of details. It is for the teacher to study in

this, as in all departments, that he may know the needs of his pupils, that he may perceive clearly what kind of instruction is best suited to their capacities.

Prof. Woodhull says that we are inclined to think the discussion of a subject at such a meeting as this settles it definitely. He warns us against allowing such an idea to take possession of us. We must see to it that the words of the essay, to which we have listened with so much pleasure, shall make us more earnest in our efforts to instil into the minds of the youth intrusted to our care those things that tend to make them better acquainted with the social needs of the community.

A mere allusion was made to a subject of special importance, viz., the educational function and value of other forces, especially of the church and the press. This topic deserves serious consideration. The various interests of a community are so intimately connected, that the forces operating upon one affect the others. The school, the church, the press, the home, the business organizations of any municipality, should work in harmony, for each exerts a peculiar influence, the more potent when combined with others.

The business man, the professional man, knows too little of the schools; and, on the other hand, the teacher is not always sufficiently well informed concerning the affairs of a community of which he forms a part. Social progress depends in no small measure upon the relations existing among those different agencies, and only when they work in harmony can we look for the best results.

Hon. B. G. NORTHROP, LL. D., of Clinton, Connecticut.—Professor Small has fitly taken for his text the pithy aphorism, “The talent for misery is the fulcrum of progress.” This maxim is based on the law of social progress, that wants are as essential as gifts; or aspirations and inspirations the condition of progress; or ideals requisite to their realization. As a company of teachers, we specially need such high ideals of the character and interdependence of the home and the school. The school is the product of many factors, and a factor in many products. The motto,—“As is the home, so is the school,” or conversely, “As is the school, so is the home,”—suggests the close connection of these vital forces. Without the school, the ideal home cannot be. The homes of any people show their condition and character, their ignorance or culture, their sloth or thrift. The Indian’s wigwam tells how little he cares for schools, or the rich acres around his hut, or the richer mines that may lie beneath them. The dwellings of the people in all lands and ages have been the index of their barbarism, or the measure of their civilization. Christianity has ever marked its triumphs over paganism by improving the homes of its converts. Any people *content* to dwell in huts without the talent for misery, must grow barbarous in their tastes and habits. Everywhere improvement in their homes marks an advance in their civilization, for modern civilization relates specially to the homes and social life of the people. In earlier times and other lands, men were counted in the aggregate, and valued as they swelled the revenues or retinues of kings. The government was the unit, and each individual only added one to

the roll of serfs or soldiers. With us, the individual is the unit, and the government is for the people, as well as by the people. The demand of the age is, to ennoble the home life of the people, and help in the practical realization of the cardinal truth, that the chief privilege and duty of life is the creation of happy, tasteful, Christian homes. Where such is one's ideal, and his home becomes his pet and pride, life has higher significance and value, for such an ideal brings new cheer and inspiration for daily duties.

The home is the objective point in the numerous village improvement societies organized within a few years. It is largely through the coöperation of the teachers of the country that this movement has spread across the continent, and is now advancing more rapidly than ever. These examples, with their manifold results in many states, now give a cumulative force to this movement which may well invite the still more general efforts of teachers and school superintendents to extend this beneficent agency. It is a worthy ambition of any man, high or low, to surround his home and children with such scenes and influences as shall make the every-day life brighter and happier; for he is happiest, be he king or peasant, who seeks and finds his happiness in his home. If the 300,000 teachers of America should impress this sentiment upon the ten millions of youth under their care, who can estimate their influence for the realization of this ideal? Let this sentiment possess our teachers, and, without any diversion from other lessons, incidentally and unconsciously it would sway the scholars.

Female teachers have heartily enlisted in this village improvement work. It is woman's sphere. Many associations have been started by ladies, and nearly all are officered, in part, by them. These organizations foster that public spirit and town pride which facilitate liberal plans and gifts. They impressively put to every citizen the question, What do I owe to my town or city? What is it my duty, or, rather, privilege, to do for it? The sentiment that cherishes one's town and state is noble and ennobling, and has characterized the best men the world has ever seen. Men of wealth would oftener respond to such calls, were the need and opportunity duly presented and appreciated. Under such appeals, large gifts are made for public improvements by citizens, and by natives who are now non-residents. Thousands of dollars come in such filial gifts, and often from unexpected sources. In view of such results, the American Institute of Instruction, last year, fitly passed a resolution inviting the coöperation of the teachers of America in organizing village improvement societies over the country.

The Washington and other centennial celebrations of the year have enlisted our schools anew in the service of patriotism, and placed the national flag on or in myriads of schools; but patriotism itself hinges on the domestic sentiments. When one's home becomes the Eden of taste, and interest, and joy, those healthful local ties are formed which bind him first to his home, and then to his town, his state, and his country. Whatever adorns one's home and ennobles his social life, strengthens his love of country and nurtures all the better elements of his nature. The nomad, with-

out local attachments, can have no genuine patriotism. As content in one place as in another, and truly happy nowhere, he is like a tree planted in a tub, portable indeed, but at the expense of growth and strength. Said Monsieur Lariaux, in his farewell address in America, "Your homes, sweet homes—these are the safeguards of your freedom. Pray that my poor France may have such homes." Guizot said, "There is nothing France so much needs as fireside diversions."

With us, the school may do much to foster home affections and courtesies, and provide home enjoyments. To this end, let there be a sacred observance of the amenities of life, and a freer interchange of kindly feeling. As flowers seem worthless only to the thoughtless, so the morning and evening salutations may seem little in themselves, and yet, when fitly observed, they are mighty in their influence, because they are constant factors in forming character. As the sunbeam is composed of myriads of minute rays, so the home should be illumined and brightened by nature's richest hues without, and still more by winning smiles within. Such beauties of nature and art, such amenities and affections, should be the sunshine of every home. They refresh and purify the social circle. Like the clinging vine, they twine themselves around the heart, calling forth its purest emotions and securing its most healthful activity. If teachers and parents combine to make the circle of school and home life beautiful without and within, they will sow the seeds of truth, honesty, and fidelity in the hearts of the young, from which they may reap a harvest of happiness and virtue. The memory of a

happy school, and home, and sunny childhood is one of the richest legacies they can inherit. The heart will never forget these hallowed influences. It is a fountain of enjoyment to which the lapse of years only adds new sweetness. Such a memory is a constant inspiration, investing school life, and all one's future, with new interest, significance, and joyousness. Professor Small well said, "The quest of the ages has been for the secret of living this life for all it is worth." Yet this secret is not far to seek; it is as simple as it is comprehensive,—the one principle of loving nature, loving man, and loving God. No sane man, who loves nature, loves his race, and loves his God, ever asks the Pagan question, so common of late, "Is life worth living?" The prevalence of gloom, insanity, and suicide bids us cultivate, as the best antidote, that love of nature which cheers and elevates, which is a joy in youth and a solace in age, which rejoices in the seasons as they pass, catching the gladness of June and the radiance of the autumnal woods, and in every waking moment finding something to take pleasure in and be grateful for.

The school and the home can effectively coöperate in the work of Arbor Day, now observed in thirty-six states. Teachers can easily interest their pupils in adorning their school grounds, and persuade parents to patronize this work, when many hands make merry as well as light work. Trees and tree-planting form a fit subject for object-lessons, especially timely on the recurrence of Arbor Day. Our schools can render new service to the state, as well as to their pupils, by leading them to observe the habits of trees, and appreciate their value and beauty, thus making

them practical arborists. Through the enthusiastic efforts of State School Superintendent Draper, this was successfully done in the state of New York, on its first Arbor Day last May, when compositions on trees were solicited from the older scholars, and when all were invited to vote on the tree which shall be their choice as the *state* tree. According to Superintendent Draper's "returns" and estimate, 45,568 trees were planted on that day, besides numerous shrubs, bushes, vines, and flowers. Even in cities, where there seemed little room for tree-planting, there are few school-houses or homes where children cannot find some place for shrubs, flowers, or vines. As a result of Arbor Day work, that most beautiful of all vines, the Japanese ivy, already adorns hundreds of school-houses and homes,—for Arbor Day has proved as memorable for the home as for the school, leading youth to share in door-yard adornments and planting trees by the wayside.

Thus, by the plantings already made, thousands of roads will become attractive by long avenues of trees. Growing on land otherwise running to waste, their shade and beauty will be grateful to the traveller, but doubly so to the planter, as the happy experience of thousands will testify.

The esthetic element, as an educational force, is often ignored. The taste should be early cultivated, and to love the beautiful be held as a religious duty. Nature is the great educator. In her school, flowers, trees, birds, and animals are our primary teachers. One of these educating forces begins when children are led to plant, not only trees, but tree-seeds, acorns, nuts or pits, and then to observe the wonderful miracles

which the tree-life they have started is working out before them. What growth of mind and heart they will gain, as they watch the mysterious forces of these living germs, their marvellous assimilating power in the curious chemistry of their underground laboratory, which, linked with the apparatus of leaves, transforms earth and even filth into living forms of surpassing beauty and fragrance! It is well for a child to know that by dropping such a germ in the earth he has made a lasting contribution to the natural beauty around him. There is nothing more ennobling than the consciousness of doing something for future generations, which may prove a growing benefaction, a better monument than any in bronze or marble. The trees which children plant around the homestead, and watch from seed to shoot, from bud to limb, from flower to fruit, will be increasingly prized, with a sentiment of companionship, and almost a kinship, as they grow into living memorials of happy, youthful days. Such educating influences will manifest themselves more and more as the years go by, to all who, as Dr. Holmes advises, "make trees monuments of history and character," even though unable to say with him, "I have written many verses, but the best verses I have produced are the trees I have planted."

X.

THE ADJUSTMENT OF SOME RECENT TENDENCIES IN ELEMENTARY EDUCATION.

BY HON. JAMES MACALISTER, SUPERINTENDENT OF
SCHOOLS, PHILADELPHIA.

[AN ABSTRACT.]

I. The existence of certain tendencies in elementary education is manifest from the changes going on in the chief educational centres, and the discussions which occupy a prominent place in teachers' conventions and the leading educational journals.

(1) These tendencies are the outcome of developments in thought and practice which have been taking place through a long course of years.

(2) They are to be welcomed and encouraged as a wholesome evidence of sound educational progress.

II. At this time nothing more will be attempted than the statement of such leading tendencies as show the general drift of opinion throughout the country :

(1) The tendency to enlarge the scope and purpose of our earliest primary education. The Kindergarten in the public school—its place and influence.

(2) The tendency to objectify the methods of instruction in the various branches; *e. g.*, arithmetic, geography, history, drawing.

(3) The tendency to connect a system of manual

training with the intellectual development of the child.

(4) The increasing tendency to correct the secular character of the public education by a larger degree of attention to the moral culture of the pupils.

III. Indisposition to accept and provide for these tendencies in the educational principles and practice of the schools. Reasons for this :

(1) The feeling that they are so many more additions to the already over-burdened curriculum of the elementary schools.

(2) The persistence with which the advocates of each of these several phases of educational reform present it as the one panacea for all the defects and shortcomings of the schools.

(3) Necessity for reconciling these tendencies. An examination of their chief characteristics will show that they are vitally related and are seeking the same common end.

IV. There are certain fundamental principles from which they all derive their sanction, and whose ends they are seeking in their own several ways to realize :

(1) That our education should seek the full and harmonious development and training of all the powers and faculties of man.

(2) That education must begin with the development and training of the perceptive powers.

(3) That all methods of training should recognize the self-activity of the child as the most important factor in its development and growth.

(4) That the ultimate end of all education should be to bring man into right relations to his natural and social environment,—that is, to nature and to life.

V. These principles are not new to educationists. They are simply the outcome of the teaching of all the great educational thinkers and reformers from the time of Bacon. They are the essential elements of a new doctrine in education which has been seeking for acceptance for nearly half a century, and which, in our own day, is destined to transform the methods of the schools, to give to the teacher's work a higher and nobler purpose than has ever been accorded it in the past, and to make the public education the chief factor in the social elevation and improvement of the people.

DISCUSSION.

REV. A. E. WINSHIP, editor of the *Journal of Education*, opened the discussion. He said that recent educational tendencies opened a large field, and whoever should attempt to adapt them would find himself with a larger contract than either Dr. MacAlister or himself chose to undertake. The able paper just read by one of the most eminent educational thinkers of the day presented vividly the need of adjustment, but left, as all such discussions have thus far left, the matter unadjusted. The fact is, that no man is, as yet, in possession of the data requisite for an intelligent consideration of the question.

There are two great needs. One is reliable facts, and the other, an appreciation of their importance. There can be little good anticipated from any irresponsible, miscellaneous, hap-hazard experimenting in Americanizing the Kindergarten of Germany and the manual training of France. There is educational

danger from the belief that German, French, or English methods can be adopted by us as they are; from the vexatious itching for newness; and from an indefinite expectancy that in some miscellaneous way good can come to the schools from experimenting. Then there is an idea clearly in the minds of reformers that an experiment is allowable to test the correctness or adapt it in application; but there are few things more vicious than a tendency to experiment in a vague expectancy that virtue will come therefrom. There is no occasion for educational experiments. What we need is brains, not manipulation; philosophy, not experimental folly.

The adjustment must be distinctively American, and it can only come from a competent and exhaustive study of the conditions of American domestic, social, industrial, and political needs; a study of what the present system has not accomplished; and of the relation of every principle of education to the specific needs of this people. These problems must be adjusted early and carefully, or our country will suffer, and it must be done by an official commission or by private benevolence. The government is ever ready to establish a commission that has political significance. It has recently sent men forth to inquire into the cost of the soup indulged in by laborers, and into the habits of the potato bug; and it can afford to make an exhaustive study of all the conditions and problems presented by the social, industrial, and political life of America.

What this country needs is an Americanized psychology applied to life through the adjustment of the tendencies of the people in their homes and shops.

ALEXANDER ANDERSON, LL. D., President of Prince of Wales College, Prince Edward Island.—*Mr. President, Ladies and Gentlemen*: I beg you to accept my hearty thanks for the cordial terms in which I have been introduced, and for the warm reception which you have given me. This being the first occasion on which I have been present at such a gathering in the United States, there must necessarily be to me much of novelty in the mode of procedure and surroundings, as well as freshness in the views which are advanced and the mode in which they are enforced and commended. But the proximity of Canada to the United States has a determining effect upon the course of educational discussion, and to that circumstance is largely attributable the approximation of subjects and methods in the former country to those of its more powerful and richer neighbor. The topics, therefore, which have been discussed, and those which still remain, are as familiar to us as to the teachers of the United States. You can well understand, then, how interesting and instructive it is for a Canadian to be present at your sessions, and become acquainted with the tendency of educational thought on those questions of moment which command the earnest consideration of Canadian teachers as well as those of the American republic.

There is, perhaps, no feature so gratifying as the wise conservatism which characterizes many of the papers to which I listened. The teaching of science and industrial education have been very prominently brought forward, and have certainly secured a large amount of attention in the discussions which followed, but not to the exclusion of matters of at least equal

importance to the educator, but of infinite moment to the community. The address which has just been delivered by the superintendent of the public schools of Philadelphia is an admirable illustration of this fact. Though in thorough sympathy with the progressive spirit of the age, it emphasizes the principles that "our education should seek the full and harmonious development of all the powers and faculties of man," and that "the ultimate end of all education should be, to bring man into right relations to his natural and social environment." In accord with the pleadings of the advocates of scientific and industrial training, it yet broadly recognizes the necessity of an education which shall mould the heart, the conscience, and the intellect.

Another excellent example was the able and eloquent paper of ex-Senator Patterson. Deeply imbued with the culture of the past age, he is yet open to the practical tendencies of the present, and is prepared to give effect to what is sound and essential in modern theories of education. Yet he is not led captive by the enthusiasm of the time, but boldly questions whether the men of the present generation are equal to those of the past, and enunciates the healthful and unassailable principle that it matters less what the instrument of culture may be, than the skill with which it is handled. And I am sure that there was no true teacher but heartily assented to his denunciation of cramming—that vicious product of our modern educational condition and arch-hypocrisy of our profession.

Your committee acted wisely and well in assigning the topic of History a prominent place in your pro-

gramme, and certainly with good judgment in the selection of the gentleman who placed the subject before us. The thoughtful and stimulating address of the President of Brown University ought to be influential in arousing an interest in that branch of study, and in correcting erroneous views respecting it. He commended it as a study to be prosecuted on scientific principles, and as an acquisition of prodigious value to its possessor. In any community, the intellectual discipline involved in the thorough study of history,—the tracing of the effect from its cause, the influence of great men upon their age and the reaction of the age upon its men, the growth of the constitution, and the development of national character, literature, and language,—is a training to which it is difficult to find an equal. But if the student be a citizen of a free country, where he is called upon at all times to exercise his right of independent judgment and to investigate matters of considerable complexity, this study is of paramount importance. Hence its value on the common school curriculum, and the obligation of teachers to make it a special subject of study.

In a country where universal suffrage prevails, the government is practically in the hands of what are generally known as the masses. It is evident, therefore, that the character of the government must depend upon that of the people. If the people be ignorant and corrupt, the men whom they will select to govern them will very probably be men of the same stamp, and good government will be impossible.

The Rt. Hon. Robert Lowe is reported to have said, in the British Parliament, after Mr. Disraeli's Reform Bill became law,—“ You must now educate your

masters." And a consequence of the extension of the suffrage, and of a conviction of the necessity of educating the rising generation, who would in turn become masters of the situation, was the great and comprehensive system of national education which has now been operative in Britain for nearly twenty years. But for a much longer period this obligation has been acknowledged in the United States, and vigorous efforts have been put forth to prepare the youth of the country to discharge the various duties of life. And yet I fear that the study of historical questions has not received, in Great Britain and the United States, that attention which its importance demands. To know the nature of the constitution under which he lives, his rights and duties as a citizen, something of the laws which he is bound to obey and the principles that regulate the relationship between capital and labor, and to be able in some degree to understand financial and international questions, are surely as incumbent upon him as any of his other acquisitions. He is bound to fit himself to earn his daily bread, but he is also bound to equip himself, as best he can, to perform his duties as a loyal and intelligent citizen.

In a country where religion cannot be taught in the public schools, history becomes an important basis of moral instruction. The conduct of individuals and the policy of nations have to be weighed and discriminative judgments formed, and thus the character of pupils is determined in some degree by the estimate that is presented to them of the actions that are examined. They are taught that profligacy and ignorance are the causes most prolific of disaster, and that their progeny are brutality, helplessness, and despair.

An ignorant people has always been, and will ever be, a menace to good order and security, while an instructed and moral people is a source of strength and confidence. This is the centennial year of the French Revolution, and while it recalls much for which we ought to be grateful, it brings to us the warning to beware lest we harbor the evils which during that terrible convulsion shook society to its foundation. The lesson was then taught, perhaps more impressively than on any previous occasion, of the certainty of ruin, utter and overwhelming, when the governing class in a nation has abandoned the old paths of truth, righteousness, purity, and reverence, and has elected to rule on a system based upon injustice, oppression, and selfishness.

When all the people are instructed and free, when men are competent to form an unbiased opinion on public questions, when they are magnanimous enough to be generous,—not afraid of their position or doubtful of their rights, not liable to be swayed by passion or prejudice,—they will then cease to be the tools of ambitious ministers, and will protest against being dragged into quarrels with their neighbors. Wars will cease, and the nations will vie with each other in the cultivation of the arts of peace, whose victories are more to be coveted than those of war.

MR. JOHN KNEELAND, Supervisor of Public Schools, Boston. *Mr. President:* The opening remarks of the preceding speaker connect very well with the subject of the morning—“The Education of the Masses.” The newspapers very generally give what the people want. Had he walked along Washington street, last

Monday forenoon, he would have found great difficulty in working his way through the crowds in front of the newspaper offices. When he can get the masses so much interested in the doings of a gathering of men and women interested in educational progress that they will stand in crowds before the bulletin-boards to ascertain what is done, as they now do to get the results of prize-fights, he may be assured the newspapers will spare no pains to give the information wanted. In time, however, we may be quite sure that whatever is said or done here, of moment, will find its way to the public, and have its due influence.

Mr. Winship also emphasized the fact that there are many and diverse opinions in regard to what shall be done in the schools in the direction of those "recent tendencies in elementary education" that need adjustment; and that other fact, that there is no competent authority in this country to adjust the divergent opinions and interests, and establish a course of school training, that shall be everywhere accepted. As it is hardly likely that any such authority, even if desirable, will exist in our day, we may be justified in leaving for a while the great questions that concern the country at large, to consider what we can do in our individual spheres to adjust in the schools themselves the demands for moral, intellectual, and manual training. Already the complaint is, that there is not time enough for the work demanded; and yet our courses of study and training must be enlarged. It is not for us to shrink from this enlargement, but so to plan our work that the gain in one direction shall not be accompanied by loss in other directions.

Mr. Walton, yesterday, found the remedy for the

lack of elementary science-teaching in the schools to be the abolition of "courses of study," and the giving of freedom to the teachers. Probably no one thing was more influential in bringing about the adoption of "courses of study," with their time-tables, than the necessity of making provision for observation lessons and elementary science. This new work, with music and drawing, as they could bring no time with them, must take time from what were regarded as the main studies. "Courses of study" were and are only an attempt to adjust the claims of the different school pursuits to the time of the school sessions, giving to each an amount of time proportionate to its importance. The introduction of new branches of study, or new kinds of training, into the schools renders a still further revision of "courses of study" necessary. If the same principle is to be carried out, some time must be taken from the amount allowed to the old work for the benefit of the new. But, really, I do not see how the time devoted to the main subjects can well be lessened. I know of no school where too much is done in reading, arithmetic, elementary science, or sundry other studies. It is everywhere too little rather than too much. We want more; and, in arranging our work to meet the new demands, we want, if possible, to get more in the old directions while securing something in the new.

I agree fully with Mr. Walton in desiring for the teacher—the competent teacher—entire freedom. "Courses of study" may to a large extent be divested of their time element. They must be retained as indicating the directions in which pupils are to be educated, as essential to a system of well graded schools;

but the manner and methods of reaching the desired results, the time to be given from day to day to one kind of work or another, excepting the subjects assigned to special teachers, may well be left to the teacher in charge of the school. In this connection, another subject of importance comes to mind, which the few minutes allotted to me afford no time for consideration,—the advantage of a less frequent change of teachers, as the pupils go from class to class in our large schools.

My method of adjustment, which I must hurriedly indicate, is to make the different requirements of the school more as one work ; to make study and training in one direction helpful in other directions. It is not devoting so many hours to arithmetic, so many to reading, and so on, that should be asked of a school, but to produce certain results in directions indicated. It is not always necessary to proceed methodically,—to take up topics in a certain order. It is better, sometimes, to strike in wherever an opening appears, to take advantage of fresh opportunities, to turn newly awakened interest to good account, thus incidentally sharpening the faculties, forming the habit of thought, and training to facility in doing. It is through keeping the whole work in mind, through working towards an end from the beginning, that this gain is to be made. It is easy to illustrate this by showing how observation-exercises, geography, history, and other lessons, may be made to contribute to an increased understanding of language and facility in its use ; how outside reading may advance various studies ; easy, also, to show how difficult arithmetical processes may be prepared for by properly arranged

exercises, and the pupil taught to recognize and apply principles.

I am admonished that I must close. Let me add a little in reference to the excellent remarks of Mr. Metcalf, last evening, upon reading as a means of improvement, and as an illustration, in one direction, of what I have been saying. It is a mere statement of what has been accomplished by a teacher during the year just past. She observed, at the beginning of the year, that many of her pupils were reading a low kind of literature, and showing a fondness for it. She did not lecture them upon their poor taste, but one day took a very interesting book to school, and at a convenient time read a few pages to them. She then remarked that she would leave the book upon her desk, and any of them who desired to read it might, at proper times, take it. There was a great demand for that book, and there was also a desire, on the part of her pupils, so to accomplish their tasks that they might get time to read it. But one book would not meet the demand; so other books were brought and placed at their disposal. The teacher was consulted in regard to books to be taken from the library. She did a great deal of reading, herself, in the interests of her pupils, and always knew what books to recommend. In this way she brought about a very decided change in the reading of her pupils, and that with no interference with the regular school work, but rather in furtherance of it.

Let me close by emphasizing the statement that it is not the completion of a "course of study" which is the main thing, but the education of the child; and by improving our processes and unifying our work we can make the needed adjustments, and accomplish

all that can reasonably be demanded of the schools. We can give the child the power to see, to think, to do,—the power to be.

SUPERINTENDENT MACALISTER was called upon to close the debate. He emphasized the point that each must, out from his own central position, hear for himself the harmony of the spheres: in other words, the adjustment of our methods to the demands of life will depend much upon the spirit of the worker, and upon the way he approaches this question.

XI.

THE PLACE OF THE NORMAL SCHOOL.

By A. H. CAMPBELL, PH. D., JOHNSON, VT.

Those who have studied the educational institutions of the various nations taking the lead in thought and progress, pronounce "the school system of Germany the most perfect in the world." This approach to perfection has been brought about during the present century; for at the beginning these schools were "deficient in organization, limited in extent, and weak in administration." Now, hundreds go from our own land every year to study her school system and methods of instruction, and return filled with enthusiasm for the work.

The principle upon which the German schools are founded is, that the state is responsible for the education of its subjects. It therefore not only encourages education, but, in the same manner in which the people are protected against incompetent lawyers and physicians, it protects them against ignorant and inefficient teachers. In the Prussian constitution of 1850, which is yet in force—for the different states of Germany manage their own educational affairs—we read,—

"Every one is free to impart knowledge and to found and conduct establishments for instruction,

when he has proved to the satisfaction of the proper state authorities that he has the moral, scientific, and technical qualifications that are requisite. All private and public establishments are under the supervision of authorities named by the state."

As the state assumed control of the schools, thus relieving the Church of the responsibility formerly borne by that, it felt, early in the present century, another duty devolving upon itself—to furnish teachers with the qualifications required by law. Hence, from this need originated the *first* normal school, which was established at Berlin in 1815. This was a new departure—an experiment—but its usefulness was soon made apparent, and others followed, until now a sufficient number have been established to furnish the needed supply of teachers. These schools have for a long time been the admiration of schoolmen in all parts of the world, and their plans and principles have been adopted and adapted to the wants of the people by every civilized nation upon the globe.

Such institutions with all their perfections were not of a sudden growth; they did not spring up in a day, but have risen to the prominent place they now hold by slow degrees. They are the outgrowth of the new ideas of early educational reformers about child-life and training. Their methods, illogical as many of them were, aroused the people to thought and action; the defects in the school system, or lack of system, were made apparent, and better ways were devised. Her statesmen, her educators, her philosophers, the wisest and best, have devoted themselves to the study of education, to discover its principles

and apply them in practice, to record their observations and the results of past experiments and experience, that each generation of teachers might not be compelled to begin back where their ancestors began, but be enabled to begin where they left the work. Thus, advance was made, and each period was a period of progress.

Nor did they stop here, but, beginning at the basis of the educational structure, mental science, they investigated the laws of thought and mental development, and all the conditions of moral and physical well-being. Thus, having learned the defects in their former methods of instruction, the powers and possibilities of the human soul and the means of developing those powers, the order and relation of their development, the methods of arousing to action, of creating a desire for further development, the best conditions and subjects best adapted for the purpose, they have established an educational *science* upon which their school system is based.

Just fifty years ago, twenty-five years after the Berlin Normal School, through the untiring efforts of Horace Mann, the great apostle of education and father of the normal schools of America, *our* first normal school had its humble birth in Lexington. Small and weak at first, meeting with violent opposition and condemnation from all (both educated and ignorant) except a chosen few who were able to see the defects in our schools, and the one condition of improvement, better teachers, who had wisdom enough not only to tolerate but to desire a new thing if reason told them it would be an improvement, under the fostering care of a few earnest supporters,

this single tree of knowledge, planted under such unfavorable auspices, has flourished beyond the conceptions of its most earnest advocates. Its branches extend from ocean to ocean, and have taken root in the soil of every state. This has not been accomplished without a struggle, which has had to be persistent, and continued to within the present decade, when the final assault of ignorance and prejudice was made. All now who make any pretensions to being educated, or interested in education, admit that there is a place for the normal school, and that it fills a most *important* place in our system of education.

In our older and more conservative states progress has been slow, and the battle for normal schools has been fought successively but successfully in every state. Every innovation is looked upon with suspicion. As the people have clung to the district system, that bane of all progress in educational work, with a tenacity worthy a better cause, so, for the same reasons, have they persisted in their opposition to normal schools, claiming that the old system, the old ways and methods, were better than the new, because *great* men were produced as the result of the old schools, not apprehending the fact that the men were great, not *because* of their early training, but in *spite* of it. There are educators to-day, some standing high in the profession, some even doing excellent work in the normal schools, who apply the maxim of the poet to the teacher, *praeceptor nascitur, non fit*, and leave the matter there, holding that all that is necessary is to thoroughly ground the teacher in the subject-matter to be taught, and let her work out *her* own methods of presenting it to her

class. True it is, that many teachers have become skilful by working out their own methods, but it is at a terrible expense to the children experimented upon.

The newer states, made up largely of the progressive element from the older states, have been more willing to adopt the new theories in regard to education, as well as in everything else: so we find them equalling, and in some cases excelling, the old in their educational systems. The normal school has a firm hold in these states and the territories, and the teachers without a special training for their work find it a difficult matter to secure good positions, while those with normal school certificates find the door of the school-room ever open to their knock. This is as it should be; for the same preference should be given in educational matters to the one who has had professional training in the science of education, as, in medicine and law, to those trained in these sciences. Yet how careful people are to see the certificate of the doctor, who deals with the body only, and how careless they are about the qualifications of the teacher, who cares for the body, mind, and soul of the child! Hence, the people must be educated up to the proper appreciation of good teaching, and the ability to recognize it when seen. This is one mission of the normal school,—to educate the people to a better understanding of their own needs from an educational stand-point, and to induce them to satisfy those needs by securing teachers qualified for their work, and paying them good salaries for services rendered.

None of the early normal schools differed much

from a good academy of to-day. To be sure, there was some instruction given in the methods and theory of teaching and school management; but most of the time and strength was put upon the mental qualifications, as the poor preparation given in the public schools did not allow much time for anything save a thorough drill in the common-school branches. The training department, and the extended course in Methods and educational Psychology, as the basis of the teacher's training, are all of a later day. Even to-day, many normal schools in our land have not outgrown this embryonic condition, and are simply fair academies with a kind of normal school attachment. When such is the case, it is not to be wondered at that the academies are jealous of them, and complain because the state pays them for doing the same kind of work done by the academies. Nor are the normal schools to be censured for their imperfect work. At first, considered but an experiment and looked upon with suspicion, they did not attract the best teachers and students: hence they had to accept such as presented themselves, or have no students. These were so poorly qualified that most of the time was necessarily spent in mastering the subjects required to be taught in the public schools, thus leaving little or no time for professional training. Gradually have the schools emerged from this state and advanced to the middle ground in their course, doing much more and better normal work, but not yet having reached the dignity of strictly professional schools. The two main reasons for this are,—First, In many schools, a lack of finances owing to the niggardly appropriation of the state for the training of its teachers. Only a few

states provide liberally for their normal schools, and this fact is to be observed in *those* schools, that the teachers dwell more upon their *wants* than upon their *resources*, thus showing that they are not satisfied to cease growing. The second great hindrance to the development of the normal school is the meagre salaries paid to teachers in the public schools, and the readiness with which any one can secure a position, providing she is willing to accept the lowest wages. Thus, few teachers, comparatively, have the moral courage to add to the academic course the year or years of professional training in the normal school, and then go out to compete for positions at starvation wages with those direct from the academy, or, in some states, more frequently direct from the common schools.

While the professional spirit is to be cultivated among teachers, as well as in the other professions, there has been a tendency to an exclusiveness on the part of those having had a professional training, which is certainly detrimental to the best interests of education in general. It is but natural that the student and recent graduates from such a course should feel that they, having made it a study, understand the science and art of teaching better than those who have entered into it without any preparation. Hence, they have sometimes been inclined to look down upon the efforts of those learning to teach by experimenting in the school-room. When such an exclusiveness is engendered, it works to the disadvantage of the normal schools; for by reason of this spirit they have, in some states, found themselves not only curtailed in their influence, but cut off from their resources for a season. So, while the normal school should be in the

front rank in every educational advance, it should not be so far distant as to be mistaken for the enemy, but should take the lead in rallying all the educational forces about the same standard, and that a standard of progress.

When we consider what a power the normal schools have been in raising the occupation of "keeping school" from the degraded place it formerly held to its dignified position of the present day, it may well be asked, What more can they do?

What is the ideal place of the normal school? Since we have less than 200 public normal schools in our land from which to recruit the vast army of teachers each year called into the field, it can reach directly but a small number of the public schools: hence, it should reach indirectly and influence greatly those schools whose teachers have not received the benefits of normal school instruction. To this end I believe there should be a closer relation between the teachers of the normal schools, employed by the state, and the educational institutes, held by the state for the general instruction of teachers in the principles of education and methods of teaching. Wherever this plan has been adopted, it has been to the advantage of both the normal and the public schools; for whatever benefits the one benefits the other, and whatever injures the one injures the other. The bonds of sympathy have been strengthened, and coöperation of effort, which always insures success in every good cause, has been the result. The normal school is a part of the grand system of education which our nation is working out. Although now occupying a prominent position, it is destined to a much higher sphere; for its ideal place is at the centre of the sys-

tem, with all the other departments of education radiating from it. To fill its place, then, there must be normal schools of the highest rank, even normal universities, where men and women of liberal education can find courses of training adapted to their wants. Then may we hope to see a reform from the method of instruction that is sometimes given in our colleges and other higher seminaries of learning. Is this a normal school dream? Perhaps it is, but if so, others have had the dream before us; for if you will but read the "aims" and "objects" of the normal school, as given by the state laws establishing them, by the state superintendents and boards of education in their reports, and by all classes of educators having the clearest knowledge and keenest insight, you will find that all are agreed that the training of our teachers is the mainstay of our school system. Mississippi, in 1870, decided that "The educated citizen makes the best citizen." Hence, as the basis of her system of schools, she established normal schools "to prepare its pupils for positions as teachers." It may not now be practicable, yet it is certainly desirable, that all normal schools of like grade be established upon the same basis, with like requirements for admission and for graduation, as in other professional schools; and, at the completion of such course of study and training, that a certificate or degree be granted which shall allow a teacher to practise his profession in those positions for which he has qualified himself, without the necessity of undergoing an examination every time he changes his town, county, or state. This is a dream of the future, but in that future it will be a blessed reality.

The line of work upon which normal schools have made an advance is indicated somewhat by the change that has taken place in the training of children. Formerly, the child was considered as having only one nature to be trained, the mental,—and the mind as only one faculty, the memory,—unless the floggings, which were severe and numerous enough, can be counted as physical training, and also, according to Solomon, as moral training. As to the systematic and harmonious development of the triple nature of the child, mental, moral, and physical, and of all the powers of the mind, such a thing was never dreamed of by "ye ancient pedagogue." If the normal school has taught but this one thing,—that the first duty of the teacher is to know himself, and the second, to know the minds and bodies with which he has to deal,—its mission has not been in vain.

The ideal normal school is well equipped in every department. The state shows its appreciation of the work by liberal appropriations. Men of the broadest culture, active and energetic, thoroughly versed in all that pertains to the teacher's profession, are at the head. A specialist in the technique of the subject-matter and in the methods of teaching it, mans each department. An enthusiasm for teaching pervades the school. A high estimate is placed upon the work. The importance and responsibility of the teacher's position is realized. The school, from its high rank, merits and receives the respect of all. It is the fountain-head of pedagogical opinions and literature. It is no empirical work-shop, but an institution founded upon the soundest principles. To its doors are attracted the graduates of high schools and academies

for professional training. Even the higher seminaries of learning find the normal school adapted to their necessities. The subject-matter in the various branches is thoroughly understood by the student upon entering, and is reviewed only for the sake of the methods. It is as strictly a professional school as are schools of medicine, law, or theology. Educating and training teachers is its distinctive work, and the basis of that work is educational psychology. By this study, a knowledge of self is gained, self-control is acquired,—for he that studies his own powers knows how to direct and use them. It discovers one's better and worse impulses and habits, and so aids in moral self-culture. For "to be master of himself one must first know himself." Through self-knowledge he is led to a knowledge of others, and thus becomes familiar with the laws of mental action and growth, which is indispensable to those who aim at guiding thought, feeling, or action. So the teacher must go out prepared to understand the thoughts, the feelings, the wills of the children to be educated; for "education is the harmonious development of all the powers of the mind." Hence, closely connected with psychology, and depending upon it for their laws and principles, are methods of teaching, the theory and art of education, and school management. Moreover, all these branches may be thoroughly mastered, but not unless there is practical application of every one of them under the supervision of the trained teacher. In other words, unless there is a training-school of all grades where all the students have much actual practice in real school-teaching, the normal school is, in part certainly, a failure. There cannot be too much training;

there may be too little. Periods of observation should precede the teaching, that the pupil teacher may see how the principles are applied; but here care must be taken lest the teaching degenerate into a servile imitation of the methods of others. The individuality of the teacher must be brought out, a confidence in self developed.

A careful criticism of the work done, and a full and free discussion of all points pertaining to teaching, serve to impress the good and remove the bad. The history of education and the record of educational reforms are essential for the complete outfit of the teacher.

One great lack among teachers is loyalty to their profession, so many are teaching as a mere stepping-stone to one of the other professions, intending to get out of it as soon as possible. Some are engaged in the work because they, for the time being, cannot find other desirable employment; they are always waiting, like Micawber, for "something to turn up" that shall release them from their thraldom. They are never satisfied; they are always grumbling; they hate the work. Happy the day when all such teachers are relieved of their labor! Others teach for money, for position, for honor. The true teacher teaches because he loves to teach. He loves to see the mind unfolding, developing, the feelings restrained, directed, the character established. It is the duty and pleasure of the normal school to cultivate this spirit of enthusiasm for the work,—an enthusiasm which is easily engendered where large numbers of young people are engaged in preparation for a common calling.

The normal school must be a *model* school in every

sense,—a school where all the students are instructed in the principles of education, and where these same principles are put in practice in the training-school under the eye of the skilled teacher.

Finally, these few general principles, too frequently neglected, it is the mission of the normal school to inculcate. Much has been done, more needs to be done, that they may become universal.

First. That the object of the state in establishing schools is to make good citizens, loyal to the state and to her institutions: hence, self-control is to be considered as the keystone of all school government, that the appetites and passions may be subdued, and the youth become citizens worthy the name.

Second. The school is bound to maintain the bodily health of the pupil, as no mental work can be well done without it.

Third. Mental development is of more consequence than mere knowledge gained. The power of concentration, the love of study acquired, the ability to gain facts more valuable than the facts learned, an earnest purpose, a persistent determination, are better indications of success than brilliancy of intellect; and more important than all else, that the end and aim of all education should be the building up of character.

DISCUSSION.

D. B. HAGAR, PH. D., Principal of the State Normal School at Salem, Mass. He gave an account of some examinations which occurred at the time of admission to his school a while since;—e. g., “Watershed: a place where animals drink.” “Why

was the Tropic of Cancer so named, and why is it situated $23\frac{1}{2}$ degrees north of the equator?" Answer: "Cancer is the Latin word meaning crab. The Tropic of Cancer is so named on account of the large number of crabs found there, and it is located $23\frac{1}{2}$ degrees north of the equator because there are more crabs there than anywhere else." From this and like experiences, he was convinced that there is somewhere a place for normal schools. Normal schools already fill a large place in the public esteem. They began, in New England, with a school of three pupils and one teacher. Now there are in Massachusetts five such schools besides the normal art school, and the other states are proportionately supplied. Much money is now expended upon them. The functions of the normal school may be enumerated,—1, to study psychology, upon which there is as general agreement as upon the doctrines of any profession; 2, the development of the laws of education, and their application to the right kind of knowledge; 3, the study of methods, not one but several and different, as of reading, and the consideration of their advantages and disadvantages; 4, to study the incentives to good conduct and work, so that teachers may make use of the best; 5, the proper arranging of studies and details; 6, the regular academic work; 7, to impress teachers with the responsibility, importance, and dignity of the profession, of which a clergyman once said, "He may make a fair teacher, but it is a poor business;" but of which Professor Agassiz was proud to call himself a member, "Louis Agassiz, Teacher;" 8, to develop a high professional spirit. In connection with the fifth function, Dr. Hagar related the

facts concerning examinations on oral lessons, on alcohol, and text-book study of cube root, to show how either oral or textual lessons may fail of their object. What is taught should be understood. In connection with the sixth function, he showed from examination percentages the improvement in school work for the past ten years.

SUPERINTENDENT G. C. FISHER, of Weymouth, Mass., followed. He contrasted normal schools and colleges: The former work at the bottom, the latter at the top; the former are from the people directly, the latter indirectly; the former must flourish best in the United States of America, the latter might be best developed in Russia. Three fourths of the valedictories at school are from the sons and daughters of laboring men. His own personal experience was given, in high school, grammar school, and superintendency chiefly concerned with the primaries. He had constantly to revise his courses. If college professors could drop down the grades, they would put up their long field glasses and look at things near at hand. The normal school has compelled the university to imitate its methods. Are normal schools accomplishing their mission? In the East, they are. In the West, if we may trust Superintendent Greenwood's severe arraignment of them, they are not. Training-schools will help, not hurt, the normal schools, as railroads create new business for the producer. The normal schools cannot supply the demand. In Rhode Island, twenty-five annually graduate from the normal school; but one hundred and fifteen positions in that state were filled by new and inexperi-

enced teachers. Let superintendents establish training-schools. When the superintendency flourishes, the normal school will flourish.

PRESIDENT LITTLEFIELD called for volunteers, especially from among the ladies.

MR. A. L. GOODRICH, Principal of the Salem High School, said that he would break the ice. One speaker put normal schools at the top of the educational or public school system; another, at the bottom. Either place is good; but the normal school, if it is to confer substantial benefit, is not of the right grade to do the greatest good. Admissions and graduations are on too low a grade: not enough is demanded. Vastly broader scholarship should be expected. Far more work during the normal course ought to be exacted.

MRS. MARY DAVIS MOORE, of Oswego, N. Y., contributed to the general discussion thoughts favoring, in particular, the development of the training-school. The training-school is the keystone in the arch of professional preparation. Without it, the normal school is merely an academy—no better. The pupil-teachers, moreover, should work alone, not under the watch of model-teachers. Further, if the prospective teachers could come up through the public schools, specially devoted to their intended professional vocation, they could and would be much better trained.

SUPT. J. G. EDGERLY, of Fitchburg, Mass., reminded his hearers that a law of supply and demand, here as elsewhere, holds in force. No doubt the

normal schools would like to raise the grade of their requirements and attainments; but, at present, to do so would be to become like Artemas Ward's famous regiment, which consisted of one private, and for all the rest brigadier-generals. Still, if towns and cities would pay enough salary, the grade might rise, and attendance with it. The proposition is impracticable, that pupils be selected at an early and immature age, and be put out of the ordinary curriculum into the method course.

HON. B. G. NORTHRUP, of Clinton, Conn., averred that the quotation from Supt. Greenwood, of Kansas City, does great injustice to the normal schools of the West. He knew, from personal acquaintance, that the Western schools, especially those of California, were fully the equals of their Eastern compeers. California, indeed, sets a worthy example in two important respects,—1, in liberal pay of her teachers; and 2, in their more thorough preparation.

MISS GRACE J. HAYNES, of the Gorham, Maine, Normal School, criticised Principal Goodrich for his strictures on the normal grade. What says he of his own high school at Salem? Does he not admit that it grades too low? Is he satisfied with it? No more are the normal schools satisfied with themselves. They do the best they can with the materials furnished. Besides, it should be borne in mind that if these students are not thus taken into the normal schools, they will teach without any normal preparation.

XII.

THE POLITICAL FUNCTION OF THE PUBLIC SCHOOL.

By HON. THOMAS B. STOCKWELL, STATE COMMISSIONER OF EDUCATION, R. I.

The public school exists for the state. The fact that this school is supported at public expense, that it is governed by public laws and controlled by public officials,—this of itself establishes the closest union between the school and the state. In the mind of every true American citizen there is always the thought, more or less clearly defined, that the school of to-day determines the state of to-morrow; and whatever may be our special theory of the basis of a system of public education, we find ourselves at the last analysis resting very solidly upon the thought that the permanency of our institutions and the education of the youth of the land are inseparably connected. It is, after all, but one expression of the universal instinct of self-defence.

Even if we are prone to accept the philosophy of the late distinguished secretary of the Massachusetts Board of Education, that every human soul is born into the world with a divine birthright of development and culture, for which human government is in duty bound to provide suitable opportunities and facilities, we press the duty full as much for what it will bring to the government as to the individual.

This thought receives added emphasis to-day in our own case from the condition of our population. We are no longer a homogeneous people, with a common ancestry, history, and political faith. Instead, we find ourselves environed by the most diverse elements, with hardly a single tie to bind them together. In some sections of the country whole villages and towns are to be found that do not contain a single native-born American citizen. Manners, habits, even speech, are foreign. They are veritable pieces of foreign civilization transported bodily to our shores. Even here, in our own New England, it is easy to find towns and cities where a large majority of the inhabitants are foreigners, or the children of foreigners, differing from their parents in little else than the mere "accident of birth." And in whatever direction you turn you will almost surely find, in every hamlet or village, two or more foreign nationalities mingling with those "to the manner born."

And yet all these people, differing from us and from each other in ways, and to degrees, that are incapable of accurate definition, and possessing the most widely divergent elements of fitness for the wise exercise of the rights and duties of citizenship, are practically, in those relations, placed upon an equal footing, not only with one another, but with all. Before the law all are equal. The great fact, however, remains, that, though American in name, they are altogether alien in thought, feeling, faith, and practice.

Now, before we can reasonably expect these people to become one with us, to enter into a true and hearty appreciation of our government and her institutions,

they must be made over ; they must become new creatures. Old currents of thought and action must be broken up and new ones formed ; love for Fatherland or the home of ancestors must be supplanted by the love for the home of adoption. New household gods are to be set up, new fires are to be kindled upon the family altars.

This is the work of education, and with the adult is almost a hopeless task ; but with the child it is comparatively easy. His whole nature is in a plastic state, capable of being moulded into any form or shape that may be desired. He has little or nothing in the way of an inheritance of foreign ideas and habits, and hence is ready to be taught and trained after the fashion of the new world into which he has recently come with so much of delight and satisfaction.

But how does the public school ensure the perpetuity of the state ? You say at once, By everything that it does for the child. True, but are the channels of its influence only indirect ; are there none by which it acts directly upon the state, upon her life and institutions ? It is unquestionably true that increase of intelligence and mental activity in a community tends to a more healthful and vigorous conduct of her political institutions ; that an enlightened conscience and a cultivated moral sense secure a more just and equitable administration of public affairs ; so that everything which enters into the intellectual and spiritual nature of the individual contributes to the sum total of the well-being of the state, and hence to her stability.

There are, however, other and more direct means through which *all* schools *may*, and the *public* school

ought to, minister to the needs of the nation. The political existence of the state and the political life of the citizen are indissolubly connected, and the latter determines the former. It is not enough to send forth our youth simply as men and women of high culture and broad scholarship, but they are to be fitted for American citizenship, for the wise discharge of its duties and responsibilities, and the proper use of its privileges and opportunities. To this end they must be grounded in certain fundamental principles of free government, and trained in some practical methods of their application.

The first specific duty I would lay upon the public school, in the line of a direct training for intelligent citizenship, is that of inculcating the underlying principles of true democracy,—that *rights* always involve *duties*; that *liberty* is not *license*; that true obedience springs from an innate reverence for law and not from fear of authority.

These fundamental truths, and others like them, are far from obtaining to-day that general recognition among our *native* citizens that they ought; how much less, then, can we expect to see them acknowledged and exemplified among those to whom they now appeal for the first time! Under a government like this, where the power is absolutely in the people, where administrations and policies rise and fall at the will of the majority, it is very clear that anything like permanent prosperity and stability cannot be hoped for unless these principles are accepted and followed by that majority. If the possession of power carries with it simply the idea that there is now opportunity to please one's self, or to gratify personal caprice or

revenge, we fall rapidly to the level of the brute. Or if by liberty we mean only the freedom to do what we choose without regard to the like freedom of others, we resolve our social fabric into perfect chaos. And he who obeys only because he must, is but deferring the day of his disobedience and revolt. All rights are turned into wrongs, and none is secure in anything.

On the other hand, if we always think of our rights as correlated to our duties, of the possession of authority as a trust to be discharged in the interests of those from whom it was received rather than in our own, of liberty as freedom of choice of the good by ourselves and freedom from the choice of evil for us by others, and of obedience as that simple conformity to the universal principle of law which contributes the only force that holds society together, we soon find all the wheels of government moving smoothly, and all her institutions developing in perfect harmony, with the most beneficent results to all concerned.

But how, you may ask, shall these principles be taught in our public schools? Not didactically, nor as a matter of mere memorizing. In the first place, they must be brought before *all* the children, not the select few who are able to reach the highest grades; and in the second place, they should be wrought into the very nature of the children, so that they may furnish right motives for action throughout their lives. Hence they must be presented in the concrete rather than in the abstract, through deeds rather than words.

First of all, the teacher must be in himself a living exponent of these truths. They must stand out in bold relief against his life, so that every child shall

readily discern them. In the daily contact of a teacher with his pupils, there is a constant temptation for him to become autocratic and dictatorial, to play the monarch rather than to serve as judge or leader. He is apt to forget that his position of power and authority, while conferring certain undoubted rights, also imposes certain equally unquestionable duties of service to those over whom he has been placed. Again: He is too often found wholly forgetful of the fact, that while he is exacting obedience from his pupils, he too is equally under authority, and called upon to render as much more perfect obedience as he is older and more mature than they.

The discipline of the school should embody these fundamental ideas so fully that it shall seem to the pupils not so much the result of the arbitrary will of a single person, as their own voluntary assent in behalf of the common good.

There is no doubt but that much more effective training for that phase of citizenship which calls for a hearty recognition of the supremacy of law and an implicit obedience to its mandates, in whatever form expressed, can be given in all of our schools. *The* question connected with the government of our schools to-day is, not whether corporal punishment shall or shall not be permitted, but whether we secure any real discipline at all. What we need is an infusion of personality into the schools that shall leave such an impression upon the child's mind and heart that he will never fail to respond to its teaching.

The course of instruction and the methods of class drill afford many opportunities to the alert teacher for such exposition of these truths as shall attract the

pupil, and compel him to give them his hearty approval. Few pupils now recognize the unity of their work, for the several branches are usually so taught that they regard each study as an independent subject. Again: The object of study at all is so often misunderstood, that it is no wonder that the child carries but little out with him into life. He needs to realize that the end of his daily routine of school duties is not the recitation and examination, but a preparation for his whole future life, and that a very essential and important part of that life should be the discharge of his duties as a member of the body politic,—as *one* of the rulers of the land.

One thought occurs here in connection with the use of systems of marking and prizes as incentives to study. They have a place, unquestionably, and may be used to advantage, but there is danger that they will lead the pupil to forget the ultimate and more distant objects of his effort, and in that event they are to be condemned. They tend to fix the thought of the pupil on himself, and to the aggrandizement of his own personal interests, regardless of those of his fellows. Such tendencies are antagonistic to republican ideas, and should be sedulously avoided for the sake of the nation.

An admirable field for much of this work is the play-ground of the school. Here, more truly than in the school-room, do all stand upon an equality. So far as natural endowments will permit, the play-ground gives all an equal chance. Here, too, there is less restraint than in the school-room: every one is his own master, and does what he pleases, or tries to. Here all kinds of personal peculiarities are revealed:

the boy shows himself exactly as he is. In the school-room there is, of necessity, more or less restraint, but in the yard all bonds are loosened. Here, too, the teacher sustains a different relation from that of the school-room. He can now stand side by side with his pupils, instead of at opposite sides of a room: he is no longer a ruler, but, rather, an elder friend, ready to sympathize with and help them in their sports and games.

Now, I am well aware that it has been declared that the recess "must go," and I do not know as it will be of the slightest use to say a word to the contrary, but for one I must enter a decided protest against its abrogation. It has never yet been proved to my satisfaction that it is safe to abolish it on physiological grounds, and I am very clear that it is absolutely demanded for its value as a factor in the training of the children, provided that it be properly employed.

To serve such a purpose, however, it must become an arena for the display of the teacher's power and skill full as much as the school-room. He must use it equally with the latter in his efforts to bring out of each pupil the best there is in him. The games of the play-ground are but the images of the strifes and contests of real life;—to-day we are pupils; to-morrow, men and women. The same motives and passions animate and inspire in the one case as in the other, and the habits and purposes of life are largely settled and determined by the games and amusements of childhood. How important, then, that the child receive at this critical period wise guidance and oversight, that he be helped to make right choices, or encouraged to acts of self-denial and service to others.

The children can be easily led to apprehend the beauty of unselfishness, or the ugliness of a selfish spirit. They are always quick to perceive the advantages flowing from conduct governed by right principles, or the evils resulting from adherence to wrong principles and methods.

If it be claimed that this service imposes additional duties upon the teacher, I question the statement. Everything that is here claimed for the pupil is involved in his proper education: not a point made can be justly said to be beyond the legitimate and proper scope of the teacher's work, if he is to fit his pupils for the right use of their birthright—citizenship in this great republic. I have no doubt that such a course as I have suggested would consume the time that teachers have been wont to employ in other ways; but I am sure that if more time were spent in this way on the play-ground, looking to the development of a higher type of manhood and womanhood, it would soon bring its compensation in the improved tone and conduct of the school-room. It may also be asked, quite pertinently, whether the teacher himself does not gain in health and vitality by this out-of-door movement, even though it be taken against his will.

No, fellow-teachers, do not give up the recess yet. It is the best field for the best work in the study of human nature. There your pupils let themselves out as is never possible in the school-room; there, too, can you place yourselves in closest sympathy and intimacy with them. I have read within a few days of a game of ball played at Cornell between some of the faculty and the college nine. I am sure that in that contest the teachers obtained an insight into the char-

acters of the boys, and the boys a respect for their instructors, that could never have been secured in the class-room, and that in consequence the teachers will teach those boys better, because the boys will give the more earnest heed to their words. The ball-ground is not a substitute for the class-room, but it has its place; and so the recess and intermission both contribute a large share to the training and development of the children. If we give up the recess, the training of the play-ground out of school hours goes on, but free from all oversight or control. Is it not better to keep the lines in our hands?

Having established the pupils thoroughly in these fundamental principles, there are a few practical points that need to be made. Every child in the country should come to his majority with a clear idea of the nature and form of the government under which he lives, of its composite structure, and its ordinary methods of administration. The three departments, legislative, executive, and judicial, should be explained and illustrated so that the pupils shall fully understand their respective functions, and thus see that the machinery of the state, which runs so smoothly, is dependent for its success upon the right adjustment of the several parts to each other, and upon each performing its own functions without encroaching upon either of the others.

One of the oldest rights, so called, of the Anglo-Saxon race is that of "trial by a jury of one's peers." To-day it may well be asked who are one's peers; and trial by jury is fast falling into disrepute. Good men avoid, and bad men seek, the jury-box. If this palladium of our personal liberties is to be preserved,

it must be reinstated in the respect and confidence of the people, and citizens of every class must be taught its value as the only safe means for the redress of wrongs and the enforcement of rights. When can these thoughts be so readily and so surely planted in the minds of a people as in childhood ; and what other means can be conceived half so effective as the public school ?

The disposition to take the law into one's own hands, to avenge one's own wrongs, is growing altogether too prevalent, and, unless speedily checked, threatens dire disaster. Certain sections of our country are already suffering from its baneful influences, and here in New England we behold far too many illustrations of its existence to remain indifferent to its perils. The supremacy of law, and the majesty of courts and all that pertains thereto, cannot be too early or too forcibly impressed upon the rising generation.

The care and conduct of the various forms of deliberative and legislative assemblies is another practical feature of political education that demands attention. This is especially true in all communities where the foreign element abounds, because these young men have little or no knowledge of these matters, and yet are rapidly coming into places of responsibility and power that demand both knowledge and experience. In former times we trained our youth for these duties in the lyceum, which was a valuable school of practice for the future parliamentarian. With the disappearance, to a great extent, of this agency, what can we substitute so well as the public school ? Legislative forms and practices, the simpler parliamentary

principles, can be introduced into the work of the schools, not only without hindering other work, but even to its advantage. Many pupils would be attracted and held to their work if it were presented to them under some such guise. Novelty is not necessarily an evil in a school-room.

Another demand that is laid upon all schools, and especially upon the public schools, is that of kindling a genuine patriotism in the hearts of the pupils. No nation has ever grown to any magnitude, or maintained her standing for any period of time, whose people were not thoroughly loyal to her and to her government, and to whom her honor and good name were not of priceless value. True patriotism alone will inspire a people with sufficient courage and determination to resist all attacks and to overcome all obstacles. The ancient Greek, nerved by this spirit, was able to withstand the hosts of a Philip and an Alexander; Switzerland is defended full as much by the intense loyalty of her sons and daughters as by her mountain fastnesses.

Intense love of country has always been the characteristic of the most aggressive and successful nations, and it may be fairly claimed to have been the leading cause of that success. It is the subtle influence that penetrates all lines of action, inspires all effort, and blends everything into one harmonious whole.

Such a love of country has had two conspicuous occasions for a display of its power in the history of this country—the Revolution and the Rebellion. The emergencies were great, but the responses were, in each case, fully equal to the demand. I doubt if any nation has ever shown such universal love of country,

such whole-souled devotion to her interests,—and yet, after a brief quarter of a century since the last gun was fired, I am constrained to believe that to-day, even among our native born population, there is a marked decrease of this sentiment.

With the rapid increase of wealth, and the development of our material resources, thought and feeling have become so concentrated upon these external evidences of strength and stability, that we have neglected the spirit which must animate it all to give it genuine life. We have grown so far away from it, indeed, in many cases, as to look askance at one who is a little exuberant in his expression of patriotic devotion. We seem to be almost afraid to praise our country in wholesome, hearty fashion, for fear we may be guilty of overdoing the the matter. Pulpit and platform and press carefully avoid anything that may look like undue praise or over-laudation.

The old time Fourth of July celebration, with its noise and bluster, its processions with brass band accompaniment, its orations devoted mainly to the exaltation of the American eagle, has almost entirely passed away, until we find ourselves now hardly able to stand even the faint percussion of the infantile torpedo, and our sense of propriety is greatly shocked if we hear the praises of Columbia rehearsed in even moderate phrase.

Now, I believe this to be all wrong. To start with, I do not think it is possible to instil too lofty an ideal or conception of one's country into a person's mind. For him it is, by the very fact of his birth in it, or his adoption of it, *the* spot on earth to be preferred above all others. While this is true in general, in the case

of this country—the only land where life, liberty, and the pursuit of happiness are open to all with absolute impartiality—it is preëminently true, and there should be no question about either the fact, or the repeated and persistent declaration thereof. The last thing for an American to be ashamed of is the glorifying of his country and her institutions. The failure to do so upon every proper occasion should awaken a sense of shame in every one who should prove so untrue to his duty and his opportunity.

What is the province of the school in this matter? It is to push the positive thought to the front; to emphasize the idea of one's country; to fill the school-room with an atmosphere of national sentiment, so that the children shall absorb it with all their work, until it shall take possession of them. How shall it be done? First, by song. Every great event in the world's history has been perpetuated in song from the days of Homer's matchless epic to those of our own Whittier. All great truths have to be crystallized into song before they can win their way into the hearts of men. So it is by songs that we can most speedily gain a foothold in the hearts of the children for this intense love of country which is alone worthy to be called patriotism. "America," the "Star Spangled Banner," "Red, White, and Blue," and many others of a similar character, should form a large part of the musical training of the children. The music is good, and as such affords the basis of good musical culture; but the main purpose should be to instil into their minds and hearts the sentiment of the songs, to make them indeed true vehicles of thought.

Again: The service of the platform must be invoked

far more than is now customary. We need to reinstate the old-fashioned declamation in its position of power and interest. Let the boys thunder if they wish to ; let the very walls quiver with the echo of Bozzaris's " Strike, for your altars and your fires ; " let Patrick Henry pour forth his scathing denunciations of British oppression ; let the resistless eloquence of James Otis flow unrestrained through the lips of your youthful aspirant for oratorical honors. I will grant you that they will overdo the matter—but what of that? It is simply the common characteristic of youth ; it is but one way, but in my judgment a very wise one, of working off some of their surplus energy. I will guarantee that it will never hurt anybody, and it is almost sure to do some good. There is hardly one of us here to-day but recalls some such scene or scenes in his school days, and its effect is clearly measured by the fact of its abiding with us all these years.

Speaking of this matter, Prof. Fiske, of Harvard University, says he has no doubt but that every boy, in New England at least, who entered the army in the War of the Rebellion, had either heard, or himself declaimed, Webster's reply to Hayne. I do not doubt the truth of the statement. I have long thought that that speech was more responsible for the uprising of the North than any other one agency.

In our work with these boys and girls there is more to be done than simply to produce culture and intellectual power. These are worthless unless they are vitalized and made potent by some noble purpose. The one such element that our *public* schools are called upon to infuse into their pupils is love of country.

But the chief source of influence, rightly used, to develop a true and healthy patriotism, is the study of our own history. The new and improved methods of studying and teaching have made as yet but little progress with this subject. We find it very difficult to cut loose from the customs of our fathers; we still cherish the notion that dates constitute the basis of history, and that battles are its chief features. Moreover, we begin it at so late a period in our course of study that but little time is left for it, and we even grudge that little.

Now this is all wrong. The children of even the primary school have as much right to be told on week-days stories about Columbus, Washington, and Lincoln, as on Sundays to be interested, and instructed too, with stories about Moses, David, and Daniel. The great salient facts of our history should and might be made "familiar as household words" in the minds of all our children long before they are able to *read* history. Many a primary and intermediate school could be transformed, by such a course of instruction as this, from a condition of semi-stagnation into one of the truest life and growth.

And even when we get further on in the course, when we take up the study of history as a regular task, let it be done not so much for the purpose of learning a given amount of matter, as for studying the men whose lives were wrought into the state and nation. Endeavor to determine the motives by which these heroes were led, the methods they employed, the sacrifices they made, the self-denial they practised,—in a word, the *kind* of men they were. Such study always tells. No boy or girl ever comes face to face,

in such a way, with Washington, Franklin, Adams, Lincoln, Grant, without carrying away in his own soul more or less of the light reflected from their glorious characters. What we are aiming at in this work is *not* absolute accuracy of *historical detail*, but the absolute possession of the historical spirit; of a real love for the past, for what it has contributed to the present, and so to us. We have been giving to our children husks for corn and stones for bread, and it is no wonder that they have grown lean and weak in those things which constitute the body of a true national spirit; and what has been going on for the past two decades is in danger of being immeasurably increased in the next two to follow. The fact that such a large proportion of our children are foreigners will be made the excuse for not attempting any such work. But this very fact creates the imperative necessity for taking it up. When can the children be so well interested in these things as in their earliest days, before they have heard much of any other country and any other great men? The fact is, *they* are our strongest hope, and that teacher whose equipment in knowledge and skill is broad enough to do this work successfully will deserve the brightest crown at the hands of the nation.

We ought to make more use of the element of sentiment in this direction. The flag of our country should play a more important part in our daily life. Every occasion that offers an opportunity to bring it forward and fasten the gaze and thought of the pupils upon it should be seized upon and utilized to its fullest extent. A movement has been made in Pennsylvania and some other states to place the Stars and Stripes

over every school-house. The movement has been defeated in Pennsylvania, and I notice that the cheap newspaper writer is disposed to ridicule the idea. Such a step simply stamps him with a lamentable lack of wisdom or insight into the work that the schools have to do. For my own part, I consider the thought a good one, and I would that "Old Glory" waved above every school-house in the land. It would be an incomparable object-lesson of the existence of the nation, and of the connection between the school and the state. To the native born it would speak mainly of the past, and by its memories spur him to do good, honest work for the future; to the foreign born it would speak mainly or altogether of the future, and by its promises nerve him to the discharge of many a duty. The Stars and Stripes should no longer be associated only with the army and navy. "Peace hath her victories, no less renowned than War," and they are equally worthy of national recognition.

It will be noticed that throughout this paper we have insisted that we must aim at producing effects upon the heart rather than upon the memory merely. I wish to emphasize that thought, not because I do not believe in memory work, but because I think we do not distinguish as we ought between the places where it should and where it should not be relied upon. Truths or principles are not to be memorized. Their possession is not a matter of the retention of words, but of comprehension and apprehension of ideas. The ability to express those ideas will largely depend upon the possession of a suitable number of words, and for that purpose we must employ the memory; and it is always well to be at work with

the memory upon the choicest selections of prose and poetry that the language affords. Such exercise stores the mind with the materials for clothing its subsequent thoughts in most fitting and expressive phrase.

In this matter we should be more concerned with the thought as it lies in the child's mind than with his expression of it, believing that of the two the former is the more important because it has to do so much with his life and conduct after he leaves his school.

Two questions much discussed in the higher educational circles at the present time are, "How to elevate present political methods," and "What duty does the liberally educated man owe to his country?" They are important questions, and are one manifestation of the undercurrent of feeling throughout the land that our political system is in danger ; but their answer, however wise it may be, will not suffice. We must touch, not the select few, but the many ; we must reach, not alone the university and the college, but every school in every hamlet. The evil we would counteract and remove is as wide-spread as the people, and the remedy must be as widely applied. This, then, is my idea of the political function of the public school,—to implant true ideas of a democratic government in the minds of the pupils, to train them in the wise and proper use of her institutions, and, lastly, to create in them an honest, soul-stirring, heart-throbbing love of country.

To this noble and exalted duty are called all of us upon whom the state has set the seal of her choice and appointment for the work of public instruction.

DISCUSSION.

MR. WM. E. HATCH, Superintendent of Schools of New Bedford, Mass., was the first speaker. He sketched the political condition of the country to-day, with its vast election expenses, and its balance of five hundred votes, which, purchased for either side, will carry the election for that party. This state of affairs is a menace to the republic. At the National Convention at Chicago, soon after the riot, he was told by a railroad manager, of extensive reading and foreign travel, that in one section of that city there were eighty thousand Bohemians, who had no conception of our country, its institutions, or its language. How shall we reach them? Through their children? In the last *Forum*, Senator Edmunds proposes a means of raising the standard of opinion in this country. Every person, child or man, is a factor in the country's welfare. The state founds the schools to make citizens. It is proposed to elevate the masses. Well, increase the comforts of the home. For this end, I believe in teaching sewing, cooking, etc. The negroes in the South merit our care. One who has a home will regard the rights of others. In our high school, the principal takes his classes to see the city council and the state legislature. Flags are provided for our high school as object-lessons in patriotism. Let the pupils study all that our flag imports.

STATE SUPERINTENDENT PATTERSON, of New Hampshire, said that the points of the subject had all been traversed, but he would speak to the question. A gentleman had asked if any of his ancestors had

fought in the Revolution. The gentleman did not know about his own ancestors ; but the speaker was able to tell him that he was represented at Bunker Hill. What you would put into a nation's history, you must put into its schools. The boy's thought is to determine the destiny of this country. You must have intelligence, patriotism, and virtue in the hearts of the people. There is no right of self-government in a school, nor in a nation in its childhood. Our fathers planted the school and the church as the two pillars of the republic. We must maintain them side by side. Children should be trained to look forward to the day when they might be called to rise in defence of their country. Not the tariff, nor finance, but the schools of the land shall establish the prosperity of the nation. The hewer of wood, or the drawer of water, who was educated in the little school-house, pondering at his loom, is the inventor of to-morrow. Temperance is made a subject of teaching in the schools, because temperance teaching among adults is a failure. A gentleman of position lately said, on a public occasion, that one fourth of the world is in the possession of English-speaking people. Soon that people, one billion strong, will control the governments of the world. The schools of America will help determine their character. Political actions and resolves will be tested by our constitution. In 1647 the Massachusetts fathers made religion the foundation of the education of the young. The child read the Scriptures in his native tongue. The schools have changed much in point of physical training ; the best product of that culture to-day is, however, not the best moral product of the schools. The heart and the memory at fifty

years of age lie close together. Let tender sentiments be planted in the minds of boyhood and girlhood. The men that shall henceforth stand on this acreage will be as true and loyal as their patriotic fathers.

XIII.

THE COMMON-SCHOOL BILL.

BY HON. HENRY W. BLAIR, U. S. SENATOR FROM NEW HAMPSHIRE.

Ladies and Gentlemen of the American Institute of Instruction: First, let me express to you my grateful sense of obligation for this opportunity to address you upon a subject dear alike to your hearts and to mine. It is our country's cause. The omen is most favorable, and, if I fail, you will still pursue the discussion for the sake of our country and mankind. I am to speak upon that leading public measure which so largely embodies the fate of popular education in the United States.

The purpose of the Common-School Bill is best stated in its own language, which, in section 11, provides, "That the moneys distributed under the provisions of this act shall be used only for common schools not sectarian in character, in the school-districts of the several states, and only for common or industrial schools in the territories, in such way as to provide, as near as may be, for the equalization of school privileges to all the children of the school age prescribed by the law of the state or territory wherein the expenditure shall be made, thereby giving to each child, without distinction of race or color, an equal opportunity for education."

To this end, section 1 of the bill provides "That for eight fiscal years next after the passage of this act, there shall be annually appropriated from the money in the treasury the following sums, to wit: The first year the sum of seven million dollars, the second year the sum of ten million dollars, the third year the sum of fifteen million dollars, the fourth year the sum of thirteen million dollars, the fifth year the sum of eleven million dollars, the sixth year the sum of nine million dollars, the seventh year the sum of seven million dollars, the eighth year the sum of five million dollars: which several sums shall be expended to secure the benefits of common school education to all the children of the school age mentioned hereafter living in the United States."

Nothing is to be paid to a state, or any officer thereof, until the legislature thereof, by bill or resolution, shall accept the provisions of the act, and if any state shall decline or relinquish its proportion, the sum so relinquished shall go to increase the proportion of those states and territories which shall accept it.

Section 2 provides the rate or basis of distribution as follows: "That such money shall annually be divided among and paid out in the several states and territories, and in the District of Columbia, in that proportion which the whole number of persons in each, who being of the age of ten years and over cannot write, bears to the whole number of such persons in the United States. Such computation shall be made according to the census of 1880, until the illiteracy returns of the census of 1890 shall be received, and then upon the basis of that census."

Wherever there shall be separate schools for white

and colored children, the money received "shall be apportioned and paid out for the support of such white and colored schools respectively, in the proportion that the white and colored children between the ages of ten years and twenty-one years, both inclusive, bear to each other, as shown by said census."

But if there be schools in which white and colored children are taught together, the proper proportion of money shall be applied to them.

By section 16 a Common School House Fund of two millions of dollars is provided, "which shall be allotted to the several states and territories on the same basis" of illiteracy, "to be paid out to each state and territory, which shall be expended for the erection and construction of school-houses for the use and occupation of the pupils attending the common schools in the sparsely populated districts thereof where the local community shall be comparatively unable to bear the burdens of taxation. Such school-houses shall be built in accordance with plans to be furnished free on application to the Bureau of Education at Washington: Provided, however, that not more than one hundred and fifty dollars shall be paid from said fund toward the cost of any single school-house, nor more than one half the cost thereof in any case."

This two millions of dollars constitutes the "Common School House Fund" for the entire period of eight years, and, added to the seventy-seven million dollars provided for instruction, makes a total of seventy-nine million dollars to be expended in eight years, or a little less than ten million dollars yearly, an average of not more than the annual appropriation for rivers

and harbors, and an aggregate for the whole period of eight years of less than the appropriation for pensions for a single year.

Compared with the yearly expenditures of the government, which are about three hundred million dollars, the ten million required by the school bill would be one thirtieth for the brief period of eight years; and for the whole period of eight years the United States would contribute to the education of the children of the entire country less than the states now pay annually for the same purpose. The sum appropriated by the United States would be less than fifty cents yearly to each child of school age, while Massachusetts and several other states now pay more than forty times that amount yearly for the education of their children of school age.

It is, in fact, a trifling and temporary contribution for the public welfare, in itself considered, but distributed, as it will be, where there is most necessity and least ability and disposition to educate the otherwise helpless child of the country, it will constitute a fountain of living water in the great American deserts of ignorance.

Section 4 provides that "No money shall be paid out under this act to any state or territory that shall not have provided by law a system of free common schools for all of its children of school age, without distinction of race or color, either in raising or distributing of school revenues, or in the school facilities afforded: Provided, that separate schools for white and colored children shall not be considered a violation of this condition."

The fifth section provides that the money belonging

to each state and territory, when ascertained, "shall be paid over to such officers as shall be authorized by the laws to receive the same," which, by section 6, shall be expended in the common schools, the instruction in which "shall include the art of reading, writing, and speaking the English language, arithmetic, geography, history of the United States, and such other branches of useful knowledge as may be taught under local laws;" and to the end that this may appear before the nation parts with its money, "Copies of all school-books authorized by the school board, or other authorities of the respective states and territories, and used in the schools of the same, shall be filed with the secretary of the interior."

The eighth section ensures and stimulates local effort by providing "that the design of this act not being to establish an independent system of schools, but rather to aid for the time being in the development and maintenance of the school system established by local government, and which must eventually be wholly maintained by the states and territories wherein they exist, it is hereby provided that no greater part of the money appropriated by this act shall be paid out to any state or territory in any one year than the sum expended out of its own revenues, or out of moneys raised under its authority, including interest money from any source in the preceding year, for the maintenance of common schools, not including the sums expended in the erection of school buildings."

The due application, not exceeding one tenth of the amount, in the discretion of the legislature of the state, to the qualification of teachers, without whom there can be no school, is secured by section 9,—"which

sum may be expended in maintaining institutes or temporary training-schools, or in extending opportunities for normal or other instruction to competent and suitable persons of any color who are without necessary means to qualify themselves for teaching, and who shall agree in writing to devote themselves exclusively, for at least one year after leaving such training-schools, to teach in the common schools for such compensation as may be paid other teachers therein."

No part of the money, except the Common School House Fund of two millions of dollars, shall be used for the erection or for the rent of school buildings of any description, nor shall any subsequent year's appropriation be made or paid to any state or territory until "it shall appear that the funds received under this act for the preceding year have been faithfully applied to the purposes contemplated by the act, and that the conditions thereof have been observed;" and it shall be the duty of the secretary of the interior promptly to investigate all complaints lodged with him of any misappropriation of any moneys or of any discrimination in the use of such moneys, and all such complaints, communications, and evidence taken upon such investigations shall be open to public inspection, and annually reported to congress.

No state which does not distribute the moneys raised for common-school purposes equally for the education of all the children, without distinction of race or color, shall be entitled to any of the benefits of this act; and the act, like any other law, may be altered, amended, or repealed whenever the public good may require.

It will be observed that the moneys provided in this bill are to be distributed throughout the country, not to the illiterates, who are, of course, of all ages and many of them beyond the reach of the schools, but upon the basis of illiteracy, to the children of school age, without regard to race or color, to give them, not to the illiterate generally, the benefits of a common-school education.

Such an observation would seem to be but trifling, were it not for the fact, that, among the many stupid or false, or stupid and false, misrepresentations of the provisions of this measure, it has been said that it proposed to distribute money upon a lying pretence, and for the benefit of those who, being illiterate, have passed beyond the period of school life.

The basis of illiteracy is adopted because it is the best possible and attainable measure of the relative necessity for aid which exists in the several states and territories wherein, and by local laws and machinery, the money must be expended and the remedy must be applied.

It is necessary to have a well defined and methodical rule of distribution; and after very careful consideration, it is found that the basis of illiteracy, as fixed by the sworn returns of the census, is not only the best, but really the only just, guide in distributing the proposed temporary national aid in the establishment and maintenance of common schools. It is found by diligent comparison of the facts, that just where ignorance does most abound, there is the greatest impoverishment and consequent necessity for national help: hence the propriety of the adoption of the census returns of illiteracy as the just mathematical rule of

distribution among the states and territories where the money is to be used. So we place all money where the necessity for its use is found to be. We fight our battles where we find the enemy, but the results of victory are everywhere.

It will be observed, also, that the money of the nation is confined to the common school, that it is applied so as to produce an equalization of the privileges of common education to all, without distinction of race or color, and yet without violating the prejudices of either race, which have in many states led to the establishment of separate schools, the colored people being quite as intensely determined upon the separate education of the children as are the other race.

By the provisions of this bill the school children of the state of Florida could receive at the most not over one dollar and twenty-five cents each, and in order to get that the state must raise at least an equal amount, making, if the state raised no more, a total to each child of two dollars and fifty cents for his education yearly; while in Massachusetts, without any aid from the national treasury, each child now receives at least twenty dollars, and throughout the Northern states generally an average of probably fifteen. Throughout the Southern states, without national aid, the average per capita for each child is not over four dollars.

Also, note that the bill carefully abstains from any interference with education within the state, except by the assent of the state; and when payment or delivery is made to the state, an expenditure of the money received is to be made by the state according to the conditions of the appropriation.

This bill does not raise any question of the right

and power of the nation to educate where the state and parent alike neglect the child. It assumes that they will properly and sufficiently educate the child, who is to be a citizen and sovereign in and of both the nation and the state, subject only to the temporary inability of the local community to bear the burden which must be carried for the common good. The principle involved, and practically asserted in the bill, is, that whenever, from any cause, whether it be the fault or the misfortune of the parent, or of the state wherein he resides, the child of the republic is deprived of the opportunity to learn to read and write the language of his country, that country, with the assent of the state and through the agencies of the state, will give temporary aid in money to secure for that child a common-school education, upon condition that the state expends for the same purpose at least an equal amount.

Accurately stated, this is certainly no very extraordinary or extreme form of usurpation of power by the nation over the destiny of the child who is to be a living stone in its own structure, and an equal sovereign with every other citizen in the perpetual succession of our republican royalty, which is a form of government and constitutional society wherein there is no order of men but the highest, and intelligence is the fundamental condition of its existence.

Such is the Common-School Bill which is now pending before the American people, and which will be the subject of congressional action within the next few months.

It has seemed to me more important thus briefly and plainly to state the provisions of the bill than to

defend them, for I have never known such perverse and persistent misrepresentations of a pending measure as has been the case with this one during the long period that it has been the subject of discussion. The bill is its own impregnable defence. There it is. Behold it!

STATEMENT OF THE CASE.

Three questions now arise: Is the proposed measure constitutional? Is it necessary? Has the nation the money?

Only the briefest discussion of each is possible. Fortunately brevity is the soul of conviction as well as of wit.

First. Is the bill constitutional? This resolves itself into another question, which answers itself. Is it constitutional for the Constitution to exist, or is the Constitution constitutional? What is the Constitution? A written instrument which the people of the United States ordained in order to provide a more perfect union, establish justice, ensure domestic tranquillity, promote the general welfare, and secure the blessings of liberty to themselves and their posterity forever.

That is an act of sovereignty, the establishment of a government, which can only be done by the supreme power. Who exercises that power in this creative, sovereign act? A chief, a dictator, some mighty warrior, or some select body of preëminent men? No; it is "we," "the people."

Here, then, is a republic in which the people are kings, for the act of government is no less sovereign because the whole people perform it. It is the same

exalted power when exercised by all as when wielded by the czar. It is even more majestic and godlike, for it requires on the part of each individual man the possession of the same virtues and intelligence which are the primary qualities in the good king.

To ordain and establish a republican form of government, then, is to ordain and establish that those things shall be provided without which republican government cannot be. It follows, that in the very act of ordaining and establishing the Constitution to be forever, the fathers ordained and established that the means of perpetuating virtue and intelligence should be provided. The king must be qualified before he can reign. The people must be educated, and the Constitution provides for the education of the people as a matter of necessity. It is not important what words are used, or whether any be used at all, which in direct terms provide for schools or education. In providing that the people shall rule, in exercising that great fundamental act of sovereignty, the creation and promulgation of the Constitution itself, for themselves and for their children forever, the people decreed whatsoever is necessary to the life of the Constitution.

The Constitution, then, irrespective of the language which may be in it or out of it, of necessity, directly or by implication, ordains that the people shall be educated. If the Constitution does not ordain education, then the Constitution does not establish a republican form of government; for without education, the means through which intelligence is obtained, there can be no republican form of government. If this be so, and no man ever even attempted to deny it, the

only remaining question is this, Does the necessity now exist for the exercise of the power?

Every child born into the world is an illiterate. Who should educate? Manifestly the national guardian, the parent; or, the parent failing, the state,—using the latter word in its restrictive sense, meaning that one of the United States in which the child may chance to live. But the state, in its enlarged and true sense, under our form of government, includes both the state and the national powers, and to the existence of each, republican in form, education of the child citizen is necessary: that is to say, it is required in defence of both local and national state life.

If, then, the national Constitution provides for its own existence, it follows that whenever, for any reason, whether of fault or misfortune, the parent and the local community, or the local state in which the child may reside, all fail to provide the means of education for the children, who are the republic, it must be constitutional to educate.

To deny this is more absurd than to declare that it is unconstitutional for the nation to build its capitol, or that a soldier under orders to march shall not breathe without a written command to inflate his lungs or move his legs.

I do not ignore the unanswerable arguments which fully satisfy the ablest strict constructionists, that the express language of the Constitution, in making provision for the levy of taxes to provide for the common defence, and to promote the general welfare, covers the appropriation of money for the necessary education of the people. Some of the expressions used by eminent men, who believe in nothing but what is

plainly written out in the Constitution, I will quote hereafter, as uttered in debate in support of this bill. But I call special attention to the constitutional argument above set forth, because no one ever yet has dared to undertake to reply to it.

The practice of the government all through our history has given a practical construction to the Constitution much broader and more liberal than is necessary in order to maintain the validity of the proposed enactment. Appropriations have been numerous for the promotion of science, the fitting out of exploring expeditions for the enlargement of the sphere of human knowledge, the observation of changes of expression on the face of the heavens, the support of humane and scholastic institutions in the states, and especially the systematic application of the public lands and of money derived from the sale of the same to the education of the people in the states ; and, as if to cover the whole case, colleges of agriculture and of the mechanic arts,—institutions of very high merit, but by no means so important as the public schools,—have been established, endowed, and are maintained in every state by funds derived from the public property of the United States.

The subterfuge and pretence resorted to by those whose hate of common schools compels them to meet these unanswerable precedents by saying that there is a difference between the power of congress to apply land, or money derived from the sale of land, to education, and the power to apply any other money derived from taxation, is manifestly absurd, and has never convinced any intelligent person who was not already a sworn enemy of the Common-School Bill.

President Pierce had occasion to pass upon this question in one of his veto messages, and contemptuously denied any such distinction as this, asserting that the power to appropriate the property of the country in land necessarily involved and implied the power to apply any money direct from the treasury to the same purpose.

Now, all these innumerable precedents have been made, not on account of any pressing or apparent necessity, but rather in the exercise of a fair and wise discretion upon the ordinary conditions of society. If there is now an emergency in our national life, and an opportunity to do some important thing,—for the general welfare is now upon us,—it is a stronger case than has existed at any previous period of our history.

Again: The surplus of 1836-'38, of about twenty-eight million of dollars, was distributed among the states, most of it being appropriated for schools, becoming the basis of huge permanent funds in some of the states, as in New York, and all transferred by the nation without any restriction at all, and with the understanding that it should never be repaid, as it never has been repaid or called for. This is found to be a very much larger amount than the bill pending provides for, when we consider that the population was then not one fourth the present number, and in wealth the disproportion is several times greater still.

Again: The whole was given at once, while the Common-School Bill appropriates only seven millions the first year, and an average of only ten for the whole period of eight years. Although a few of the states were indiscreet, being without any restrictions by the general government, yet, even in that day of wild-cat

banks and crazy speculations, the great mass of this immense sum was so placed by the states that no like amount of money ever did, or is now doing, more good since the foundation of the world.

But I must not delay with these instances.

OPINIONS OF GREAT MEN.

Let me quote a little from others.

Washington, and all the fathers, were pronounced in favor of the education of the people, and that, too, by national means when necessary. The Father of His Country declared that "Knowledge in every country is the surest basis of public happiness." In his farewell address he adjured the nation thus: "Promote, then, as a matter of primary importance, institutions for the general diffusion of knowledge." He was addressing the whole people, his children, the country, and not the state.

Jefferson advised the appropriation of the surplus in his time to public improvement and to education. He said,—"Science (knowledge) is more important in a republican government than in any other." "Education is the only sure foundation that can be devised for the preservation of freedom and happiness." "Educate and inform the whole mass of the people. Enable them to see that it is their interest to preserve peace and order, and they will preserve them."

These were utterances of Thomas Jefferson, and he ought to be considered a sound Jeffersonian Democrat, if there be any; but many are obliged to discredit his democracy in order to maintain their own.

Referring to the fifteenth amendment, President Grant said, in his message upon its ratification,—"I

would therefore call upon congress to take all the means within their constitutional powers to promote and encourage popular education throughout the country, and upon the people everywhere to see to it that all who possess and exercise political rights shall have the opportunity to acquire the knowledge which will make their share in the government a blessing and not a danger. By such means only can the benefits contemplated by this amendment to the Constitution be secured."

Would to God that Grant were here! Vain wish, for if ye will not believe President Harrison, who twice voted for this bill, neither would ye believe though Grant—nay, though all the fathers—should descend from glory and rise from the dead.

President Garfield wrote in his inaugural address,—“The danger which arises from ignorance in the voter cannot be denied. It is a danger which lurks and hides in the fountains of power in every state. The census has already sounded the alarm in the appalling figures which mark how dangerously high the tide of illiteracy has risen among our voters and their children. The nation itself is responsible for the extension of the suffrage. For the North and South alike there is but one remedy. All the constitutional power of the nation and of the states, and all the volunteer forces of the people, should be surrendered to meet this danger by the saving influence of universal education.”

Had Garfield lived, this bill would have been a law eight years ago. Already its expenditure would have been made, whereas it is not yet begun. God willing, the bill shall become a law if the battle goes on until its last friend now living be dead. Who can compre-

hend the good that has been lost to the nation and the world and the universe, to time and eternity, by this wicked and irrational delay. "It might have been."

Take now the declarations of great senators who have advocated this bill upon the floor of the senate:

Senator Edmunds says,—“It is, therefore, as it seems to me, a case in which all the common treasure of all the people may fairly be devoted in aid of this great and necessary object for the preservation of real republican government.”

Senator Evarts concludes,—“Now, then, in a word, Mr. President, I confront this immense, this dangerous, this growing, this threatening mass of ignorance. I find a deliberate, a concerted, a thoughtful, a valuable measure. I am heartily in favor of the passage of this bill.”

Senator Sherman: “Without reproaches to any section, I am willing, as one of the senators of Ohio, to vote from the national treasury a large sum of money this year, and from time to time, so long as the necessity exists, a liberal sum of money to aid in the education of the illiterate children of the Southern and Northern states.”

Justice Lamar, when a senator, said,—“I have watched it with deep interest and intense solicitude. In my opinion it is the first step and the most important step the government has ever taken in the direction of the solution of what is called the race problem; and I believe it will tell more powerfully upon the future destinies of the colored race than any measure or ordinance that has yet been adopted in reference to it,—more decisively than either the thirteenth, fourteenth, or fifteenth amendment, unless it is to be con-

sidered, as I do consider it, the logical sequence and practical continuance of those amendments. I think that this measure is fraught with almost unspeakable benefits to the entire population of the South, white and black. It will excite a new interest among our people; it will stimulate both state and local committees to more energetic exertions and greater sacrifices, because it will encourage them in their hopes in grappling and struggling with a task before whose vast proportions they have stood appalled in the consciousness of the inadequacy of their own resources to meet it."

What an appeal, and what a revelation of the real character of Lamar!

Senator and Attorney-General Garland: "This bill might very aptly be styled a bill to extirpate illiteracy in the United States. For one, I did not require any amendment to the old constitution to enable me to find the power of congress to do this. In conclusion, I implore both sides, and all sides, to come together, and vote for this bill, and be a unit upon it, as we have been talking about it and promising it for years and years past."

Senator Voorhees: "The measure itself now before the senate has never been surpassed in the elevation and benevolence of its spirit, nor in the magnitude and value of its immediate and ultimate purposes."

Senator Hoar: "I profess to be a friend to this bill. I undertake to say that the legislature of this nation has a right to undertake to save the life of this nation against whatever danger."

Senator Pugh: "I do not believe that any measure approaching this in importance has been before the

senate, or is likely to be before the senate, this session, with as much popular approval of its passage."

Senator Vance: "I believe it to be my duty to vote for this bill, and I shall do so."

Senator Brown: "I am very clearly of the opinion that there is no constitutional difficulty in the way of the passage of this bill."

Senator Jonas: "I accept this bill in behalf of the people, whom I in part represent, as a great benefaction."

Senator Cullom: "There is no enemy of the republic who does not make the public school system of this country the point of his attack, either open or insidious, as the case may be; and there is no friend of the republic who should not do all that may be in his power to defend and strengthen it."

Senator George: "I know of no measure likely to engage the attention of congress which has so much of benefit to the people, whom I in part represent on this floor, and also to the people of the United States."

Senator Williams: "Mr. President, this is a proposition so manifestly humane and just, that it is difficult for me to see how any one can withhold his support from it."

Senator Gibson: "In my opinion, reflecting men in all parts of the country have formed the deliberate judgment that the education of the people, the enlightenment of the suffrage, the elevation of the people's character and the popular conscience, the awakening of a loftier and healthier sentiment of national patriotism, are absolutely indispensable to the preservation of constitutional liberty."

Senator Ransom: "I will presume to say that I do

not think it possible that any member of the senate can be more anxious for the passage of this bill than I am."

Senator Hampton: "Actuated by these motives, I feel bound as a citizen, as a senator, as a patriot, to support the bill under consideration."

Senator Logan: "I have always been in favor of common schools and schools of a high grade, and am to-day."

Senator Call: "I undertake to say, Mr. President, that you cannot appropriate too much money in this country to education."

Senators Morrill, Jones, Dawes, Frye, Platt, Jackson, Jones, Fuller, Jackson, Mahone, Riddleberger, Dolph, Miller, Eustis, Blackburn, Stanford, Stewart, Mitchell, and others, have all declared and voted for the passage of the Common-School Bill.

President Harrison, when a senator, said,—"Holding these views, Mr. President, I am sincerely solicitous that Federal aid should be extended to the states in such a way that the kindly impulses of that increasing body of Southern men who showed a kindly disposition toward the elevation of the colored race shall be recognized and encouraged."

With this statement of the arguments, precedents, and declarations of leading men, dead and living, in our history, I feel justified in claiming that the constitutionality of the Common-School Bill is beyond question.

IS NATIONAL AID NECESSARY?

Let us now for a few minutes examine the second question.

Is the enactment of this bill necessary? Is temporary national aid to education necessary at the present time? When may such necessity be said to exist?

Obviously it must exist, not when, and simply because, the parent and state refuse, from inability or indisposition, to perform that duty to the child, but from the fact that the child is not being educated, whatever may be the cause of that failure. The necessity is that the child be educated, and if it be not done otherwise, the nation must, in self-defence, perform that primary and indispensable work.

The question, then, is this: Is the American child being properly educated to-day?

I shall answer this question briefly by the statement of general and comprehensive facts.

Twice has the Republican party endorsed the measure in its national platforms, and it is now in power in all the departments of the government, under a solemn pledge to enact it, with a president who has voted twice for it, and who, in his letter of acceptance and in other public declarations, has given utterance to his sentiments in favor of national aid to the education of the children of the nation, wherever it is needed in all the states. They must have judged it to be necessary.

By the census of 1880, there were sixteen millions of children of school age, of whom ten millions were not enrolled, that is to say, did not attend in the public schools at all.

There was an average daily attendance in the public schools of less than six millions of children out of the sixteen millions of school age. There are less than six hundred thousand enrolled in private schools,

leaving more than five millions of school age not in attendance at any school of any description.

In a total population of fifty millions of all ages, more than five millions over ten years of age could not read, and over six and one fourth millions could not write. It should be observed that this test of intelligence is the very lowest that can be prescribed. Probably there were ten millions of these people, or more, whose education was not sufficient to be of practical advantage in learning and discharging the duties of citizenship.

Two millions of legal voters could not read and write, of whom nine hundred thousand were white, and eleven hundred thousand were colored. The total number of voters was ten millions, of whom probably, at least, four millions were so imperfectly educated that they were unable to read the common newspapers of the day intelligently. For all practical purposes, two fifths of the legal voters of the country could not read intelligently, one fifth could not read and write at all.

It may be stated as very nearly the truth, that the Northern states have two thirds of the population and about one third of the illiteracy; that the Northern states have about four fifths of the taxable property of the country and the Southern the remaining one fifth; and that, while the colored people are one third of the Southern population and have at least that proportion of the children, the white people of that section own, no doubt, more than nine tenths of all the assessable property. Few negroes own any taxable property, and the white people, whose taxable property is about one fourth that of the people of the North, per capita,

have, at least, twice the burden to bear in the way of taxation, in order that the children of the Republic in their section be educated for the duties of life: or, in other words, according to their ability to pay taxes, the Southern actual owner of property has to pay four times as much as the Northern owner of property, in order to educate the children of the community in which he lives. It should be remembered, too, that school-houses and apparatus have all to be provided there, while we have accumulated our plant and have improved our teachers by the expenditures of generations who educated us, and whose labors have made ours comparatively easy. The property of the South is more generally fixed than at the North, and it is more difficult to obtain ready money from it by taxation than is the case at the North, while the losses and destruction of the war, not yet repaired, absorb a larger proportion of current taxation than with us, making it correspondingly more difficult for the Southern people to maintain efficient schools.

In the New England States, by the census of 1880, the rate of taxation was \$1.58 on the hundred dollars, of which 20.2 per cent. (one fifth) was for school purposes. In the Middle States the rate of taxation was \$1.82, of which about 19.5 per cent. was for schools. In the Southern States the rate of taxation was \$1.58, and 20.1 per cent. of it was for schools. In the Western States the rate of taxation was \$2.03 on the hundred, and 26.6 per cent. was for schools.

Considering the peculiar circumstances of the Southern people, it must be admitted that they are bearing their full share of public burdens, and that as large a

proportion of the money raised is appropriated for schools as can reasonably be expected.

About eighty millions of dollars is annually paid out for public schools in the whole country, of which about sixteen millions, or one fifth, is raised and expended in the South, where one third of the children reside. I believe it to be no exaggeration to say that one third of the Southern children attend no schools at all, and that the remaining two thirds do not receive one half the schooling received by the Northern child, while the instruction given is of inferior average quality. In some of the cities there are good schools for a part of the children, but four fifths of the Southern children live in the country, while even in the most favored cities there are great numbers of children for whom no provision whatever is made. I believe, too, that there is greater destitution of the means of education among the children of poor white people than among the colored children, upon whom Northern charity is almost wholly concentrated. The distress of our own blood is greater than that of the colored race. It is time that the sympathy of the nation be awakened for the child of the Southern Anglo-Saxon race. If these white children are not educated, neither race can rise. More white than colored children are suffering for education in the South to-day. It is a fact, ascertained by actual count of the Record of Deeds in the county of Winston, Alabama, that seven out of every ten deeds executed by white men are signed with the X or mark, and nine out of ten white women sign in the same way. A prominent member of the Women's Christian Union wrote me that there are whole counties in Kentucky wherein

there is no school of any kind whatever. One of the superintendents of education in a county of Virginia wrote that the school-houses in his county were many of them made of logs, without windows, and that light was admitted through an aperture, which was closed by a board when the inclemency of the weather was too great for endurance ; that the seats were logs split in halves and without backs ; and that all the furniture in the ninety school-houses in his county was not worth ninety dollars, or less than one dollar to each house.

It is possible that the condition of some parts of the South is improving, but it is doubtful whether it be so as a whole. The secretary of state of Louisiana lately wrote to me that the records of the last election in that state, the laws of which require the signature of the voter, demonstrated an increase not only of colored but of white illiteracy among the voters. He gave me the percentages of increase, which were marked and alarming.

Dr. Allen, secretary of the fund for missions of the Presbyterian denomination among the Freedmen, reported to the assembly of that great body of Christians, last May, 1889, as I copy from the public prints, that illiteracy among the colored people is increasing. He said that "in the South there are 1,840,556 colored children of school age, and of this number only 802,585 attend school. Illiteracy is on the increase. It can be seen in the rapidly growing number of illiterate voters of whom unscrupulous politicians take advantage." Such testimony comes from every source, while in New York and Connecticut, and in other localities of the North, the same intolerable and disgraceful truth, that illiteracy is gaining upon

the republic, seems to be conclusively established. I doubt whether the condition is being improved in a single state, as a whole, and I look with apprehension for the revelations of the census of 1890.

Whatever they may be, it is clear that a tremendous upheaval of popular emotion and sentiment is indispensable, and extraordinary effort is necessary, and will be for years to come, in order that the country may be raised to that high altitude of intelligence and virtue where the citizen must live if his liberties and happiness are to be preserved.

It is sometimes said that it is better for every state to educate its own children. But they do not do it, they will not do it, and many of them cannot do it, while the nation as a whole can at least aid them to perform the great work.

Suppose it even to be their fault: does that better the condition of the helpless child, or of the nation which is to suffer from his ignorance in all time to come? Can he educate himself in his *a b c*? Do we withhold the gospel because it is not called for? But education is called for, and from all over the Southern plains we hear the Macedonian cry. These are not the voices of aliens, but of our own countrymen—our own kin and the partners of our own destiny: nay, their condition determines ours. Not a single Northern state but has received and prospered in receiving national aid, in money, funds, and lands. The enemies of public schools comprehend far better than many of the poor tools they use, that the great question of the permanence and universal dominance of the public school, as the system of education for the children of the republic, is literally to be

determined by the fate of this bill. Without the temporary aid of the nation, the public schools of the South will fail, and the education of the children of that great section will fall into the hands of those who believe in the denominational and the parochial school,—either thus, or permanent ignorance must prevail. This is the death of the republic. The nation must take its choice. The decision is forced upon us. "With malice toward none, with charity for all," I am for the public school. The American Republic shall educate the American child. The common school is the cradle of the Republic.

HAVE WE THE MONEY?

To come now to the final question, Have we the money?

Yes, just now we have a surplus, and it is enough. And remember, that it will cost no more to give proper education by the exertions of the states and nation combined, than for the states to perform the work alone, while it will equalize both the burden and the benefit. But this is no question of a surplus. This bill has been pressed upon congress and the public for many years. It antedates the surplus, and should be passed whether there be a surplus or a deficiency. The children must be educated, or there will soon be neither surplus nor nation. It is a question of existence, and to talk about the trifling burden of ten millions a year, to be taken out of the three hundred which we expend, in order to vitalize the public school system of the country as a serious matter, is unworthy of a great or even of a small people. The expenditure of this money will return ten-fold in

national wealth, to say nothing of the preservation of our liberties and form of government.

THE CIVILIZATION OF THE NORTH.

The capital and labor and civilization of the North is to-day, far more seriously than by foreign competition, threatened by the increasing production and the cheap labor of the South,—cheap because ignorant,—and which cannot consume that production at home because low wages leave nothing wherewith to buy. If the Southern laborer and farmer and mechanic were intelligent, his wants would increase and his wages go up, and the producer could sell to the people at home. Thus the increasing and diversified industries of the South would build up the fortunes and improve the condition of the whole people of the South, instead of seeking a market at the North, where already both capital and labor suffer from insufficient returns.

This bill is a more important economic measure than the tariff, and to the North it is even more vital than to the South. The tariff may protect us from the cheap productions of foreign lands, but the law must be forever freetrade among the states, and nothing can long protect us from the cheap commodities of the South but to increase the general intelligence and thereby better the condition of her whole people, so that with their increased wages and consequent purchasing power they may absorb at home their increasing production, and leave their present market to the labor and capital now fixed in the North. Then the South would be a home market to herself. Thus,

by giving knowledge to the South, shall we bless that great section of our beloved country, relieve our own industries, and save the whole.

CONCLUSION.

Ladies and Gentlemen of the American Institute of Instruction, you are the educators of the country, and to you is committed its destiny. By virtue of your high function, you are charged with this great responsibility.

The Common-School Bill is in your hands. For years you have upheld the cause, and by personal effort and formal but emphatic resolutions you have maintained this great measure, through prolonged vicissitude, obloquy, and desperate opposition.

There is coming in the next session of congress an opportunity, the first ever yet presented, when the measure may become a law. I appeal to you to move upon Washington and complete your work.



